

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?



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Extended Essay

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Question:

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Stéfan Janse van Vuuren

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Abstract

Geelong's existing road network does not cater for the ever increasing demands placed upon it and as a result, the new Geelong Ring Road is currently under construction. An effect of this Ring Road in Geelong, Australia will most likely be urban sprawl. Consequently, this essay examines the influence that the Geelong Ring Road will have on urban sprawl (the lateral growth of urban areas), in response to the research question;

- **It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in the immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?**

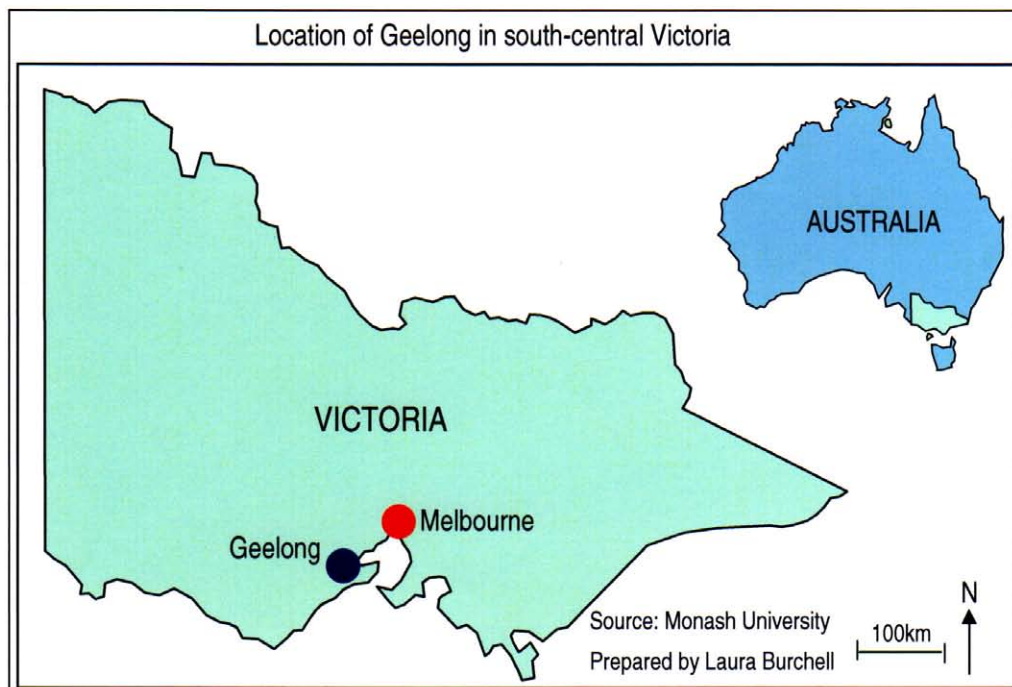
Through the primary evidence collected that found the responses of over four hundred people, predominately from the Geelong region, on this issue and further supported by the *Melbourne 2030* model and various transport models by Dr Jean-Paul Rodrigue, that were adapted to the Geelong Ring Road, the City of Greater Geelong planning schemes and numerous articles collected on the issue, it was found that urban sprawl will occur on the suburbs adjacent to the Ring Road, particularly in Waurin Ponds, Lovely Banks and Armstrong Creek. Urban sprawl would also occur in the satellite towns of Geelong in the townships of the Surf Coast and Bellarine Peninsula, Lara and Bannockburn. The essay also attempts to identify the urban sprawl that will occur in addition to the planning schemes and current zoning of the areas already earmarked. The concept of urban sprawl however raises further questions of, actually how far will this phenomenon occur in Greater Geelong, the Surf Coast and Bellarine Peninsula? Will it occur to the extent that the satellite towns of the Surf Coast and Bellarine Peninsula merge with Geelong to form one great metropolitan area?

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1: Introduction

Victoria's second largest city, Geelong, is located in the south-central region of Victoria, a state of south eastern Australia (see Map 1). It is situated 80km, or a one hour drive, southwest of Victoria's capital city Melbourne, on the western edge of Port Phillip Bay (see Map 2) and *'is a hub for a radial road network, which provides direct links to Melbourne, the Bellarine Peninsula, south-western Victoria, Ballarat and Bacchus Marsh'* (City of Greater Geelong, Department of Infrastructure and VicRoads, 2003).



Map 1: Geelong in relation to Victoria.

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Map 2: Map of Greater Geelong and Melbourne, including major transport routes

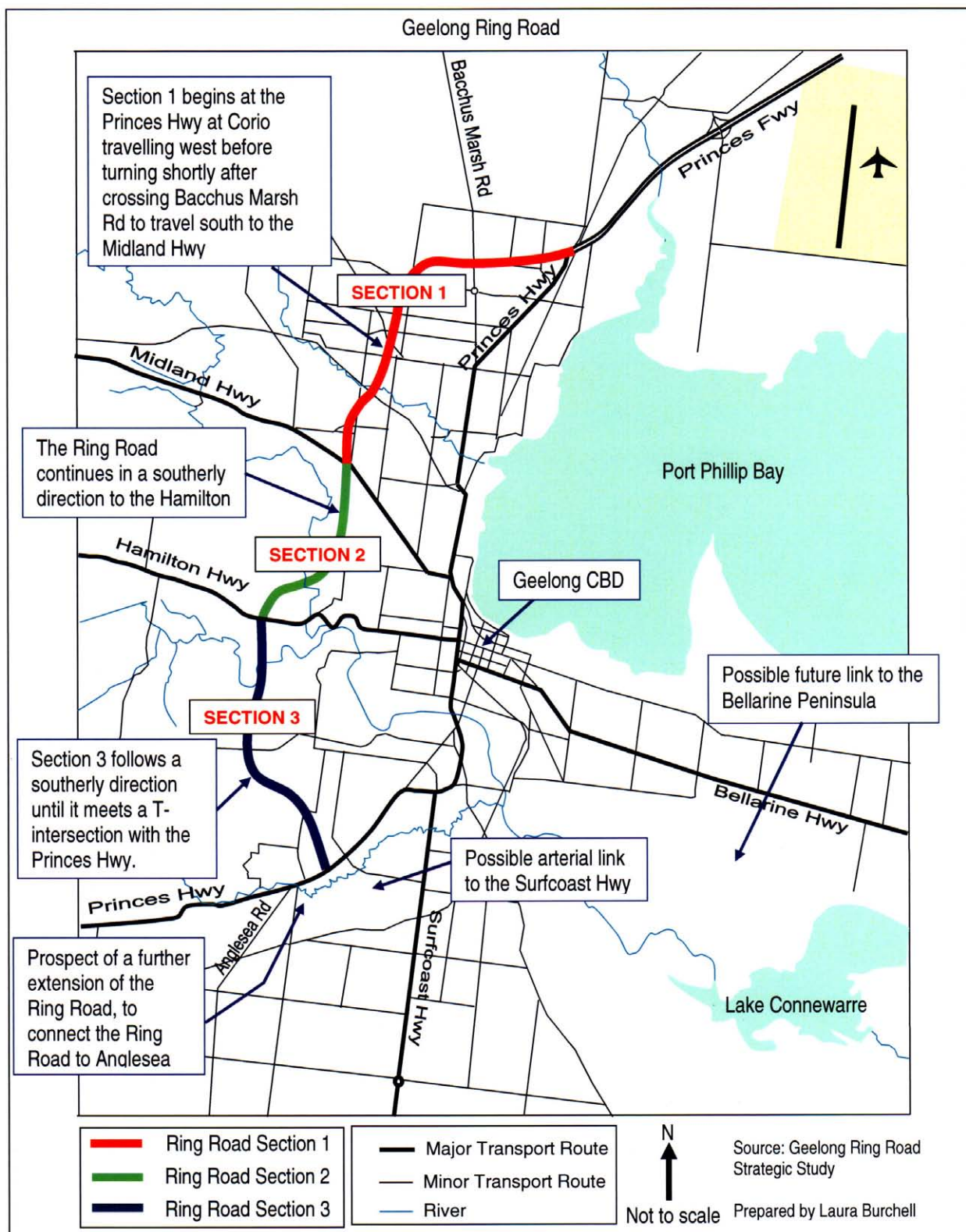
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As far back as the 1950's the case was mounted that Geelong's transport network (see Map 2) will not provide for Geelong's future urban expansion and growing transport needs. The necessity for a ring road around Geelong was identified in order to reduce future increased traffic congestion and air and noise pollution along the Princes Highway through Geelong, and to increase access to the Bellarine Peninsula, Surf Coast and the Great Ocean Road. The Geelong Ring Road was proposed and construction began in 2006. This essay asks:

- **It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?**

The Geelong Ring Road is proposed to be 23km in length and is located along the existing freeway reservation which was established in the 1970's on the western fringe of Geelong. It is broken into three main sections which are exemplified on Map 3.

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Map 3: The new Geelong Ring Road that is proposed to be 23km in length and is currently under construction.

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The *Geelong State of the Environment Report* declares that, '*amongst the many pressures on the land, none are more prominent in Geelong than urban expansion.*' (*City of Greater Geelong Council, 2001*) As a result of this urban growth in Geelong, urban sprawl- which involves the lateral growth of urban areas usually encroaching on valuable agricultural land and unspoilt natural land- is also likely to occur. Figure 1, shows the phenomenon of suburbanisation and represents urban sprawl as a result of the development of a major transport network. This is later applied to help model future urban sprawl in Geelong along the adjacent suburbs, portrayed in Map 4, to the Ring Road. Already, areas have been earmarked for urban growth and are mentioned in the *Geelong Transport Strategy (2003)*, *Geelong Ring Road Strategic Study (2002)* and *Greater Geelong's Planning Scheme (2006)*. These include the Armstrong Creek Development, Hamlyn Heights, Lovely Banks and Highton. Thus, making them already identified key zones for urban sprawl. While the City of Greater Geelong has identified these areas for potential urban sprawl, this essay aims to support these claims but also to go even further in identifying additional areas to those already recognized.

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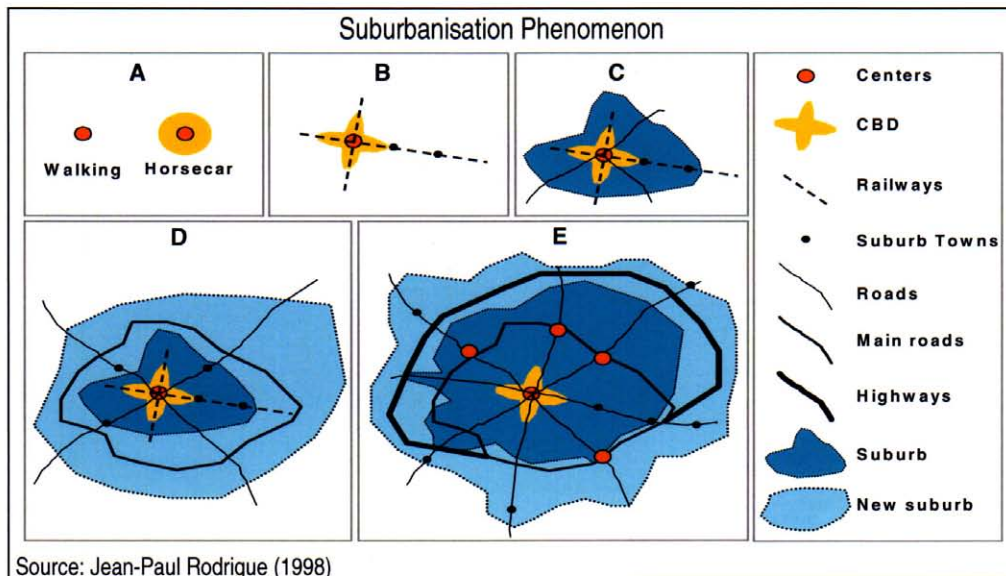
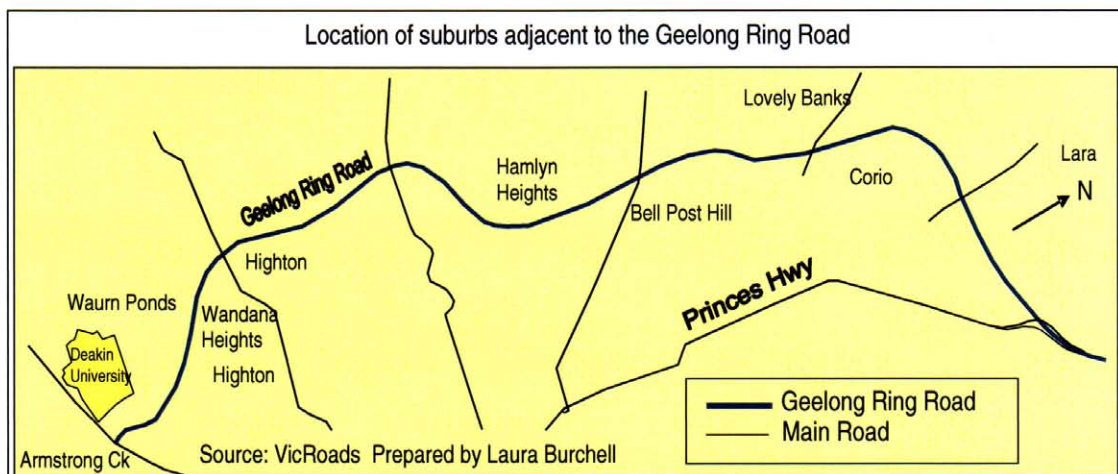


Figure 1: Model of suburbanisation phenomenon, developed by Jean-Paul Rodrigue (1998)



Map 4: Location of suburbs adjacent to the Geelong Ring road in which urban sprawl may potentially occur

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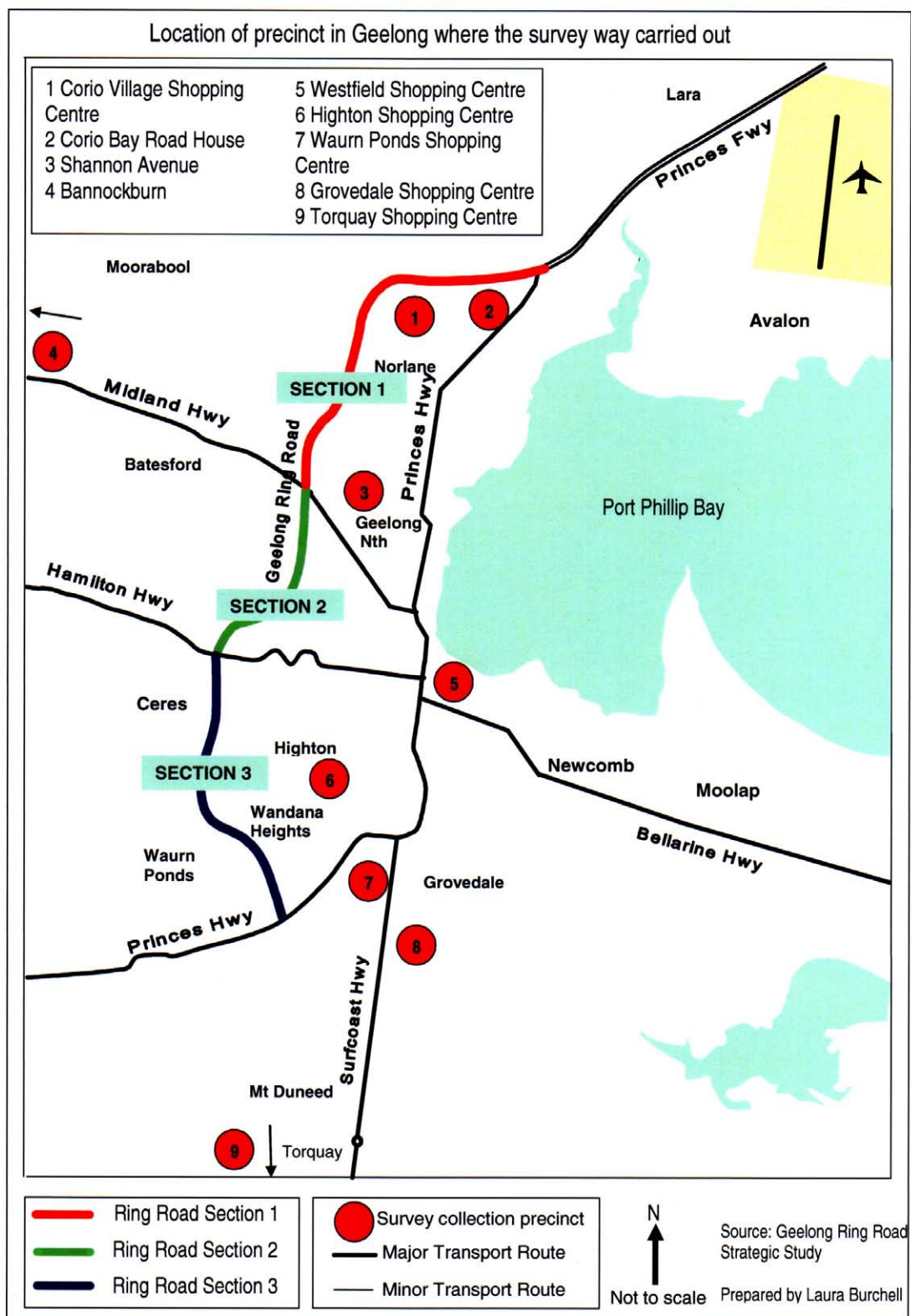
2: Data Collection

A large part of this essay examines an extensive investigation underwent by means of a survey (see Appendix A), in order to gain an idea of the citizens of Greater Geelong, visitors, and other nearby surrounding residents', from a broad cross section of ages and incomes, views on the Geelong Ring Road and urban sprawl. The survey ultimately aimed to identify people's thoughts on urban sprawl as a phenomenon in general and, if and where, urban sprawl would occur as influenced by the development of the Geelong Ring Road. This data collected- summarized in Appendix B- would then be further supported by secondary evidence also gathered. It also aimed at gauging an idea of people's feelings in general about the Ring Road and what they believe are the perceived benefits and concerns that its development will hold for Geelong, for these feelings, perceived benefits and concerns will to a degree influence the rate that Geelong is predicted to expand to.

The survey was conducted over a period of four days, from December 26th, 2006, to 29th of December 29th, 2006, and involved 406 participants. Illustrated in Map 5, the survey was conducted around various main and suburban shopping precincts in Geelong. Surveys were also undertaken in Bannockburn and Torquay.

Numerous newspaper articles were also collected about the Eastlink Freeway, growth rates in Geelong and the Surf Coast, the proposed Armstrong Creek Development and the makeover of Waurin Ponds shopping centre, that were used to relate how the Geelong Ring Road will influence urban sprawl. A model of the *Melbourne 2030 Strategic Plan* and various transport models by Jean-Paul Rodrigue were also collected and adapted to the Geelong Ring Road.

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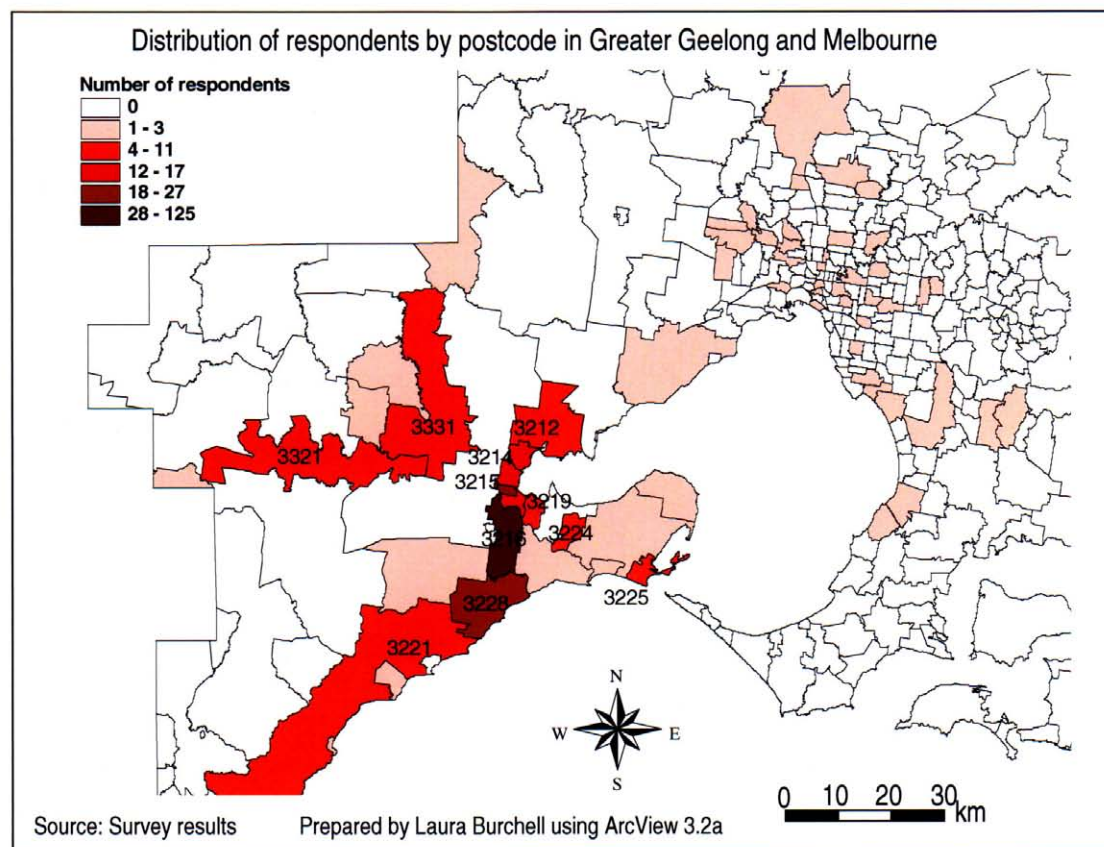
Map 5: Location of shopping precincts where the survey was carried out.

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3: Data Analysis

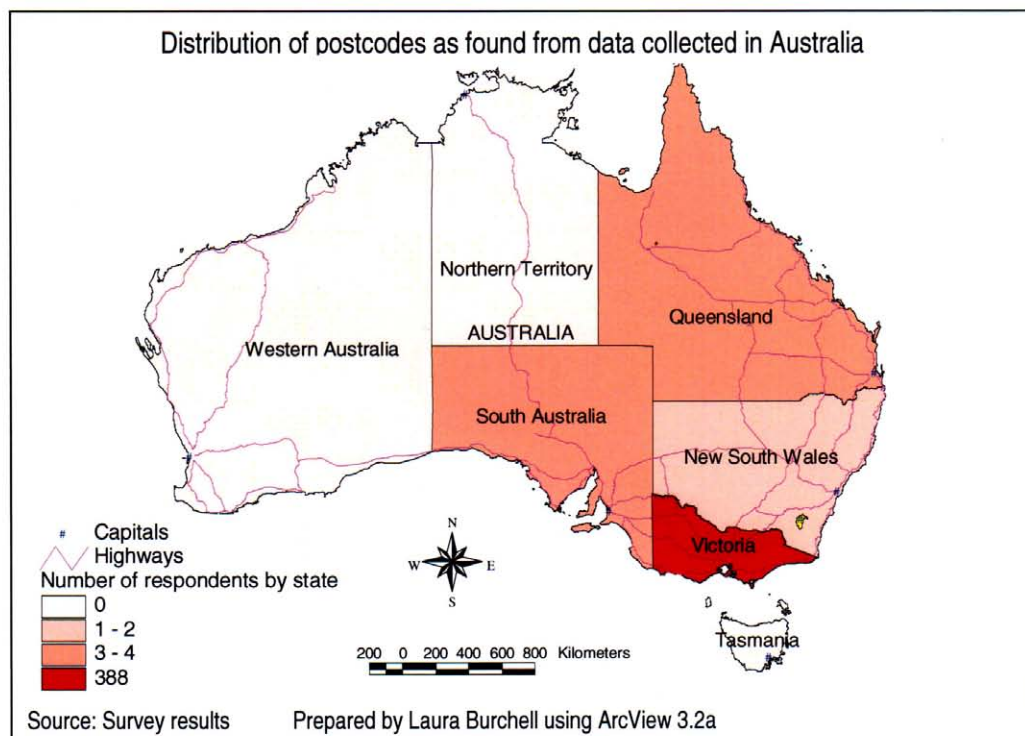
3.1 Survey results

Illustrated in Map 6 the participants surveyed from the Greater Geelong region were mainly from the postal addresses most directly influenced by the Ring Road. It is understandable that these participants probably have the greatest understanding of the future prospects and growth patterns in the areas surrounding the Ring Road. Therefore, the results (Appendix B) gained from these respondents have special significance in giving the most accurate results that could be derived from the survey. While the majority of respondents were from Victoria, in particular the Greater Geelong region, exemplified in Map 7 there were also a small proportion of respondents from interstate.



Map 6: Distribution of postcodes in Greater Geelong and Melbourne as found from data

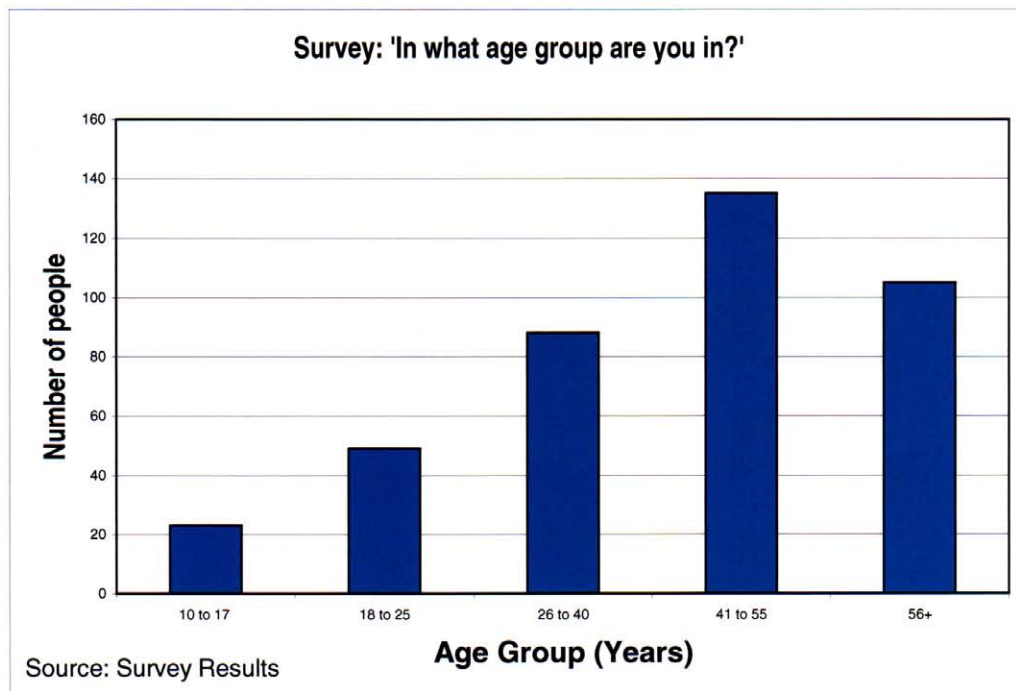
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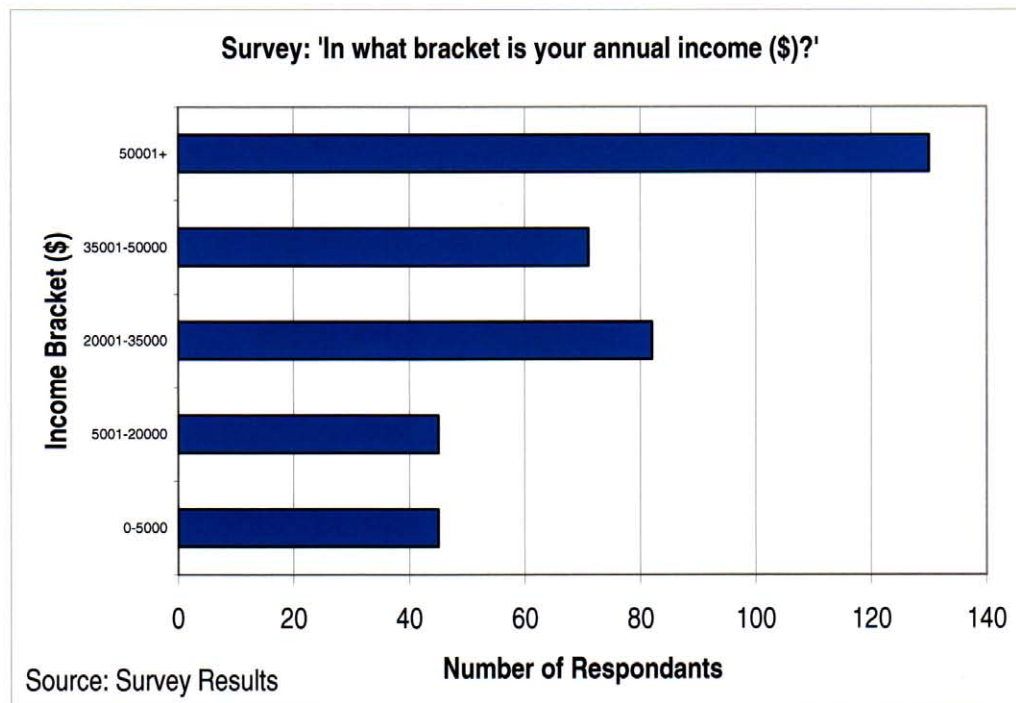
Map 7: Distribution of postcodes in Australia as found from data collected

When considering the age group of respondents and income levels, a wide cross section of people, were also surveyed. Evident in Graph 1, the greatest number, totalling 135 participants, fell in the age bracket 41-55 years. Again with relation to the respondents' income brackets, a large cross section were surveyed. Represented in Graph 2, the largest proportion of participants generate incomes of \$50,001+, followed by the income bracket of \$20,001-\$35,000. Thus, the survey gave a good overall representation of the varying thoughts on the issue, which is vital in giving an unbiased and representative set of results.

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Graph 1: Results from survey question; 'In what age group are you in?'

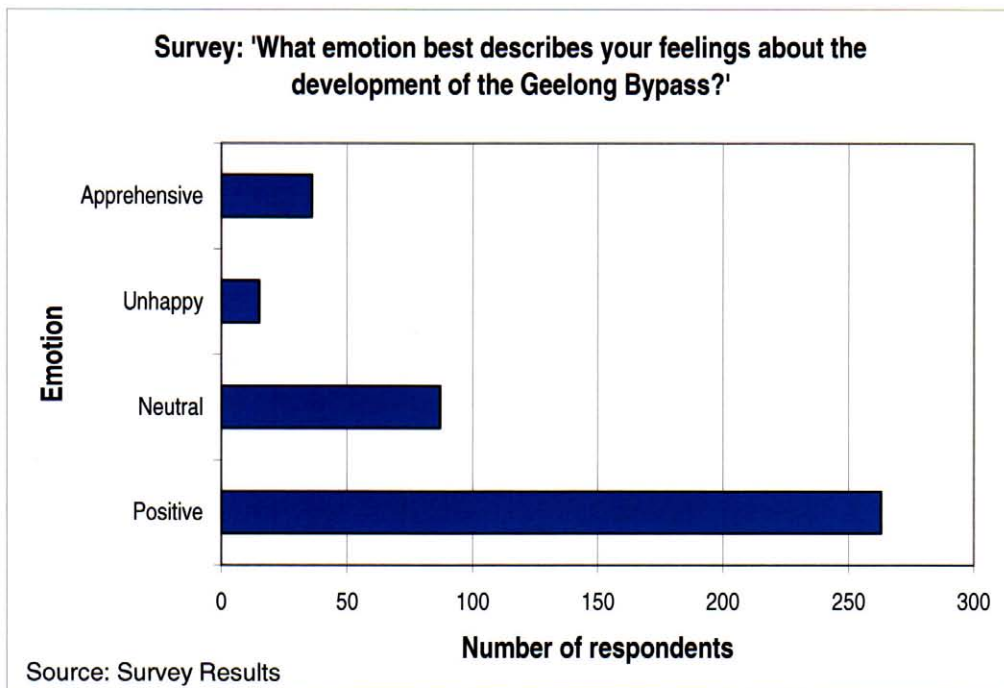


Graph 2: Results from survey question; 'In what bracket is your annual income (\$)??'

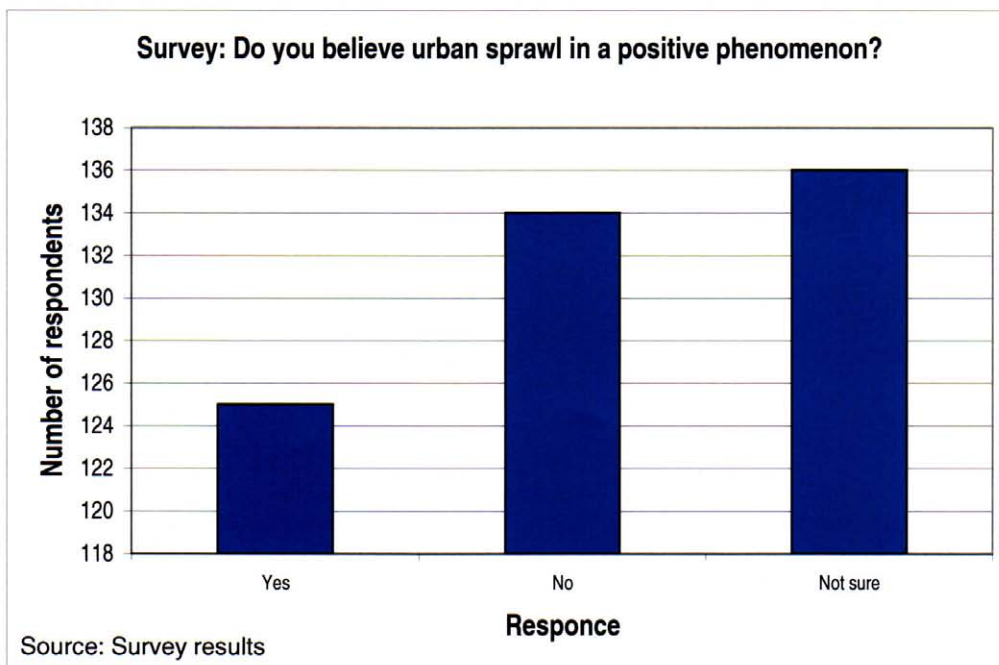
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It was found that the majority of respondents, 66 percent, have a positive view about the development of the Ring Road, and 34 percent believed that urban sprawl is not a positive phenomenon. This is shown in Graph 3 and Graph 4. There was, as illustrated in Graph 5, also a fairly even distribution of the perceived main benefits of the Ring Road. The benefits are very closely linked with VicRoads key objectives for the Geelong Ring Road, in particular to *'Enhance the tourist gateway to areas such as Victoria's West Coast, Surf Coast Great Ocean Road and Otway Ranges'* and *'Enhance commuting from major metropolitan and regional employment centres.'* (VicRoads, 2004, p.7). Hence, making these regions highlighted and Geelong more inviting places to live, and consequently stimulating urban growth. Depicted in Graph 6, the main concerns about the Ring Road were again evenly spread across the different choices. Additionally, a limitation became evident upon analysing this survey questions results. Many respondents did not indicate that they had a concern and twenty seven of those indicated specifically that they had 'no concern'. In reflection, an additional box for 'no concern' should have been included in the survey, to accommodate for this significant proportion of the respondents who indicated thus.

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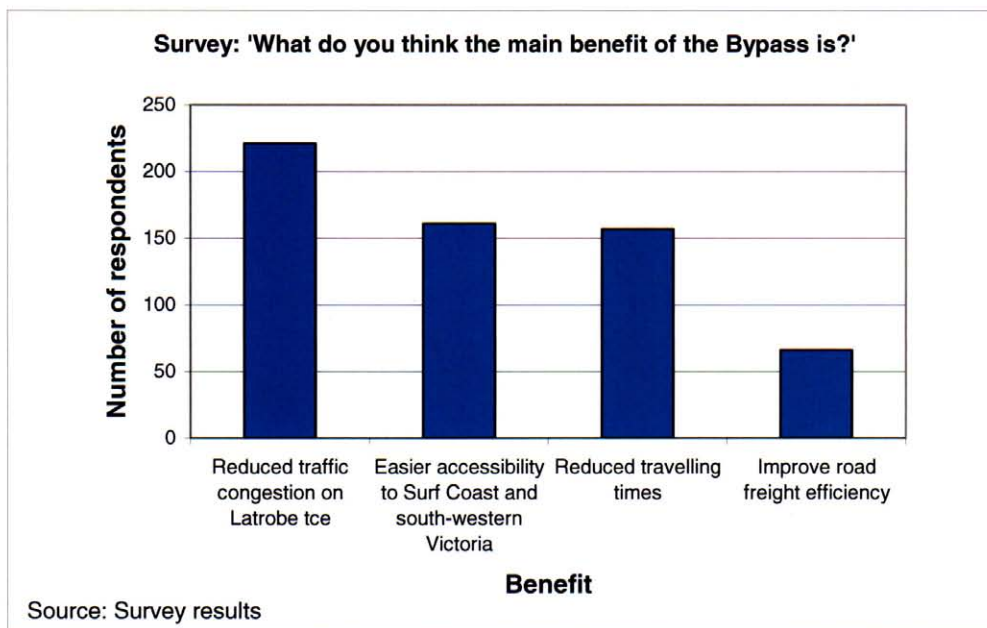


Graph 3: Results from survey question; 'What emotion best describe your feeling about the development of the Geelong Bypass?'

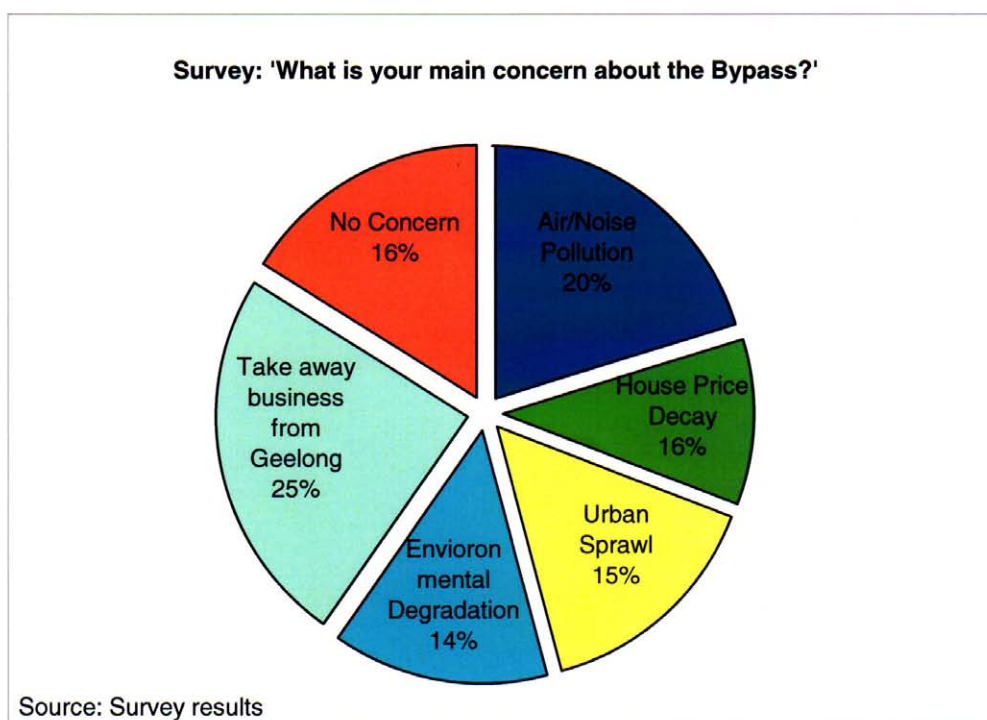


Graph 4: Results from survey question; 'Do you believe urban sprawl is a positive phenomenon?'

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Graph 5: Results from survey question; 'What do you think the main benefit of the Bypass is?'



Graph 6: Results from survey question; 'What is your main concern about the Bypass?'

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As has already been stated earlier in this report, it is widely believed that there is a strong relationship between transport networks and urban sprawl, in particular that the development of transport networks encourages the expansion of urban sprawl as *'Urban sprawl in many megacities...usually occurs along main transport routes, such as roads, rivers or railways.'* (Codrington, 2005). In relation to Geelong, declared in a *Joint Media Statement (2006)* by the Victorian Minister for Transport and the Australian Government Minister for Local Government, Territories and Roads, *'It (the Ring Road) will boost growth in Geelong, particularly around the southern fringe near Armstrong Creek, Mount Duneed and among the satellite towns on the Bellarine Peninsula'* (Lloyd and Batchelor, 2006). To support this statement, it was found that shown on Graph 7, 55.1 percent of respondents believed that the Ring Road will increase urban sprawl. This is further reinforced in the *Geelong Transport Strategy (2003)* that *'residential development densities on the fringe of the urban area have been low'* (City of Greater Geelong, Department of Infrastructure and VicRoads 2003, p.88). From this it already suggests that urban sprawl is occurring and thus it can be predicted highly likely that this process will continue to occur as is evident in Figure 2. The *Greater Geelong Planning Scheme* acknowledges this potential for urban sprawl but also highlights that the Geelong Council has in place a *'Strategy for directing and managing the expected urban growth'* in doing so, *'maintaining a relatively compact urban form and rejecting uncontrolled urban sprawl.'* (City of Greater Geelong, 2006) In the survey, 32.6 percent of respondents also responded 'Not sure' about whether the development of the Geelong Ring Road will increase urban sprawl. This large proportion of respondents responding 'Not sure', may be due to the respondents lack of knowledge about urban sprawl and the role of transport networks in this process.

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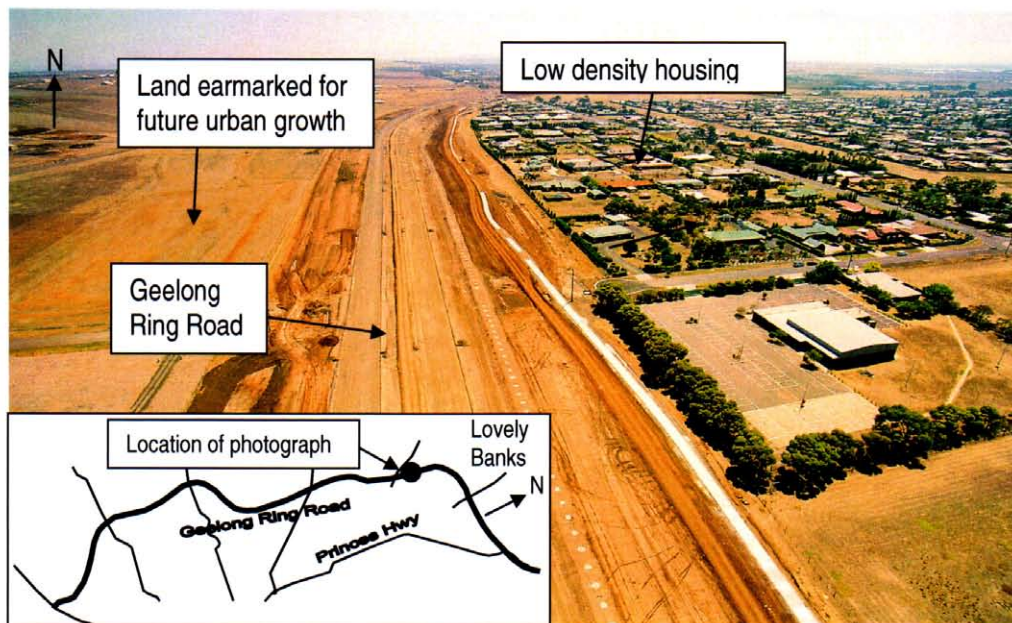
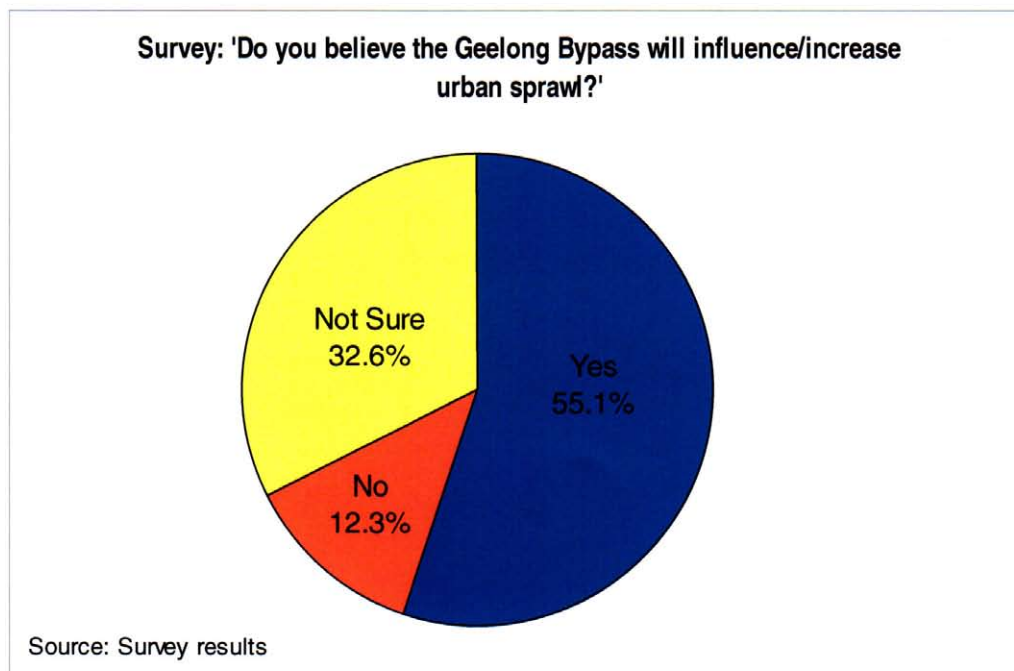


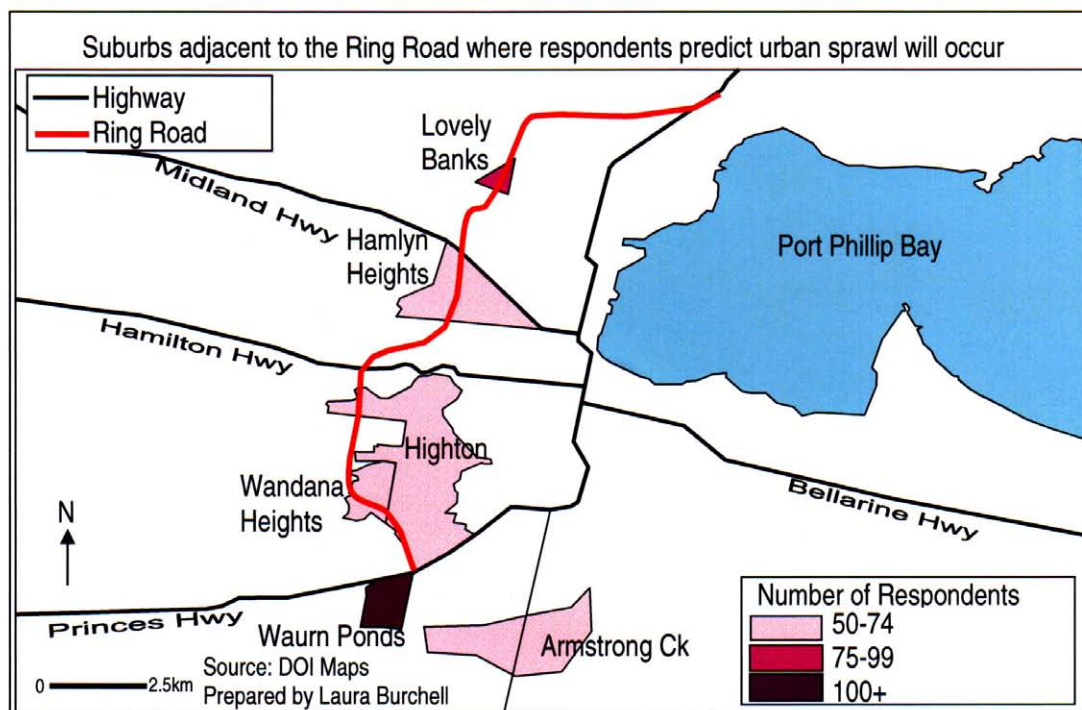
Figure 2: Looking north, the construction of the Geelong Ring Road, with low density housing on its east side and land earmarked for urban sprawl on its west side.



Graph 7: Response to survey question; 'Do you believe the Geelong Bypass will influence/increase urban sprawl?'

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According to the *Geelong Ring Road Strategic Study (2002)*, within the Geelong region some of the current and strategically identified growth areas include those suburbs of Waurin Ponds, Wandana Heights, Grovedale and those along the southern fringe areas of Geelong, which includes Armstrong Creek/Mount Duneed (Map 8). There exists a strong correlation between these areas and the results collated from the survey. The final and most significant question of the survey posed, 'In what areas do you believe urban sprawl will occur?', with choices being suburbs located very close to the Ring Road as they will be most directly affected by its development. Clearly the most common response was Waurin Ponds with 177 votes. Hence, 31 percent of respondents identified Waurin Ponds as a major area for urban sprawl. Waurin Ponds was followed by Lovely Banks with 19 percent of votes (94 votes). Armstrong Creek, Wandana Heights, Highton and Hamlyn Heights all followed closely together with 10 to 12 percent each of the respondents' votes (57 to 68 votes). This is shown on Map 8, where the different coloured densities of the region indicate the number of responses that the suburb tallied.



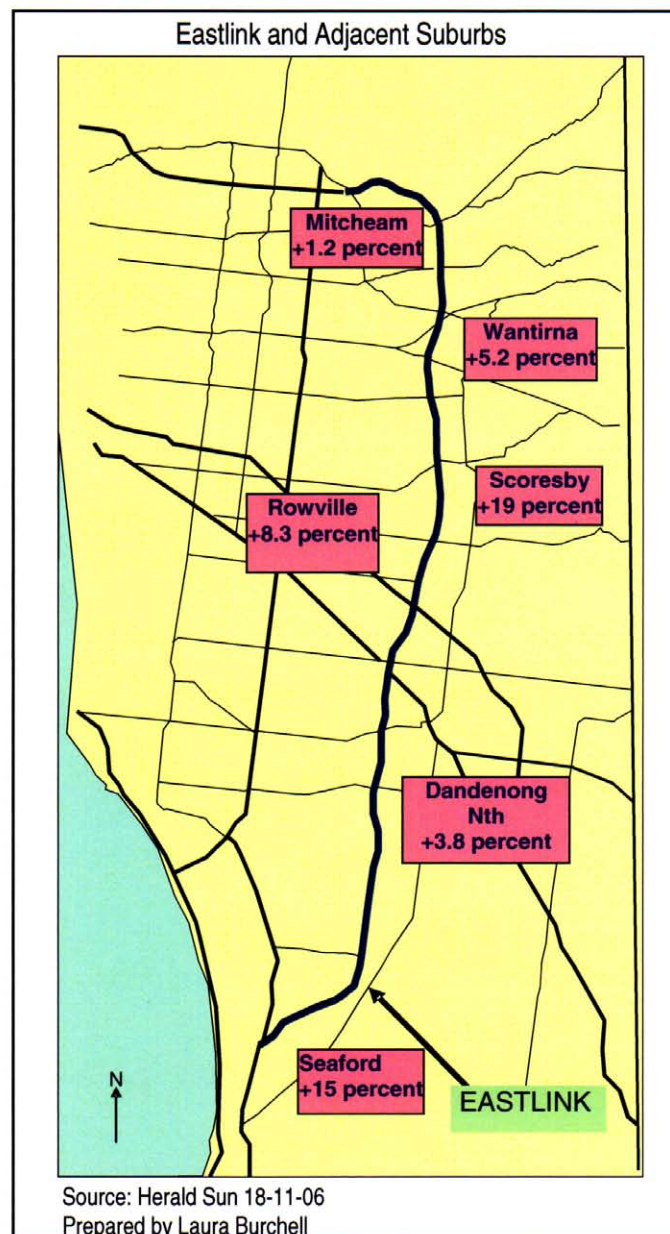
Map 8: Response to Survey Question: 'In what areas do you think urban sprawl will occur?'

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3.2 Contrasting the Geelong Ring Road with the Eastlink Freeway

The idea that urban sprawl will occur along the suburbs adjacent to the Ring Road can be supported by the urban growth response to the development of the Eastlink Freeway in Melbourne (Map 9). *The 'Construction of the Eastlink freeway has sparked a frenzy in the real estate market, with house prices soaring in adjacent suburbs.'* (Mitchell, 2006) In a similar article from the Herald Sun, it is stated that, *'The Eastlink effect will continue unabated this year with property pundits tipping strong price growth in suburbs along the tollway'*, and *'Victoria's peak residential real estate body (REIV) has named four suburbs close to the \$2.5 billion tollway among its 10 'suburbs to watch' for the year to come'* (Taylor, 2007). Shown on Map 9, there has been significant growth in the suburbs on either side of Eastlink, including Seaford, Dandenong, Rowville, Scoresby, Wantirna and Mitcham. Thus, by examining the influence of the construction of Eastlink on urban growth, similar parallels can be drawn with what is predicted to happen with the construction of the Geelong Ring Road.

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Map 9: Location of adjacent suburbs to the Eastlink Freeway where there has been a boom in house prices and growth.

With the statement that: *'Population projections made by the Department of Infrastructure and the Australian Bureau of Statistics indicate that the City of Greater Geelong will need to accommodate an additional permanent population in the order of 41,000 to 71,000 persons up to 2020'* (City of Greater Geelong Council, 2006, p.1) in mind, it is clear that Geelong is a key

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region for urban growth for *'Greater Geelong is the fastest growing regional municipality in Victoria'* (Geelong Ring Road Strategic Study, p.31). Therefore, with the development of the Geelong Ring Road, similar to the Eastlink example, it is the areas adjacent suburbs to the Ring Road that are definite prospects for urban growth as it would now cater for the higher and increasing traffic demands.

3.3 Encouraging the growth of decentralized activity centres

Reflected in the survey results, Waurn Ponds is the main area in which urban sprawl is predicted to occur. To support this suggestion that Waurn Ponds is indeed a major growth area, in 2007 the Waurn Ponds shopping centre is being extensively renovated with new shops, a larger car park, kiosks and improved walkways. Stated in the article *'New shops and a new look for Waurn Ponds centre: \$35m makeover'*, *'It just shows the area is growing more dramatically and obviously the shopping centre developers believe they need to be catered for'* (Fraser, 2006). A significant reason behind this development reported by the Australian Unity Investments Head of Property, Martin Hession, is that *'Areas of rural and semi-rural land close to the centre have been identified for residential development...driving demand for shopping outlets.'* (Fraser 2006) In Figure 3, adapting the model of Jean-Paul Rodrigue (1998), Geelong can be classified as a weak centre with activity centres located adjacent to the Ring Road. This could be related to Waurn Ponds which is located close to what will be the end of Section 3 of the Ring Road at its intersection with the Princes Highway.

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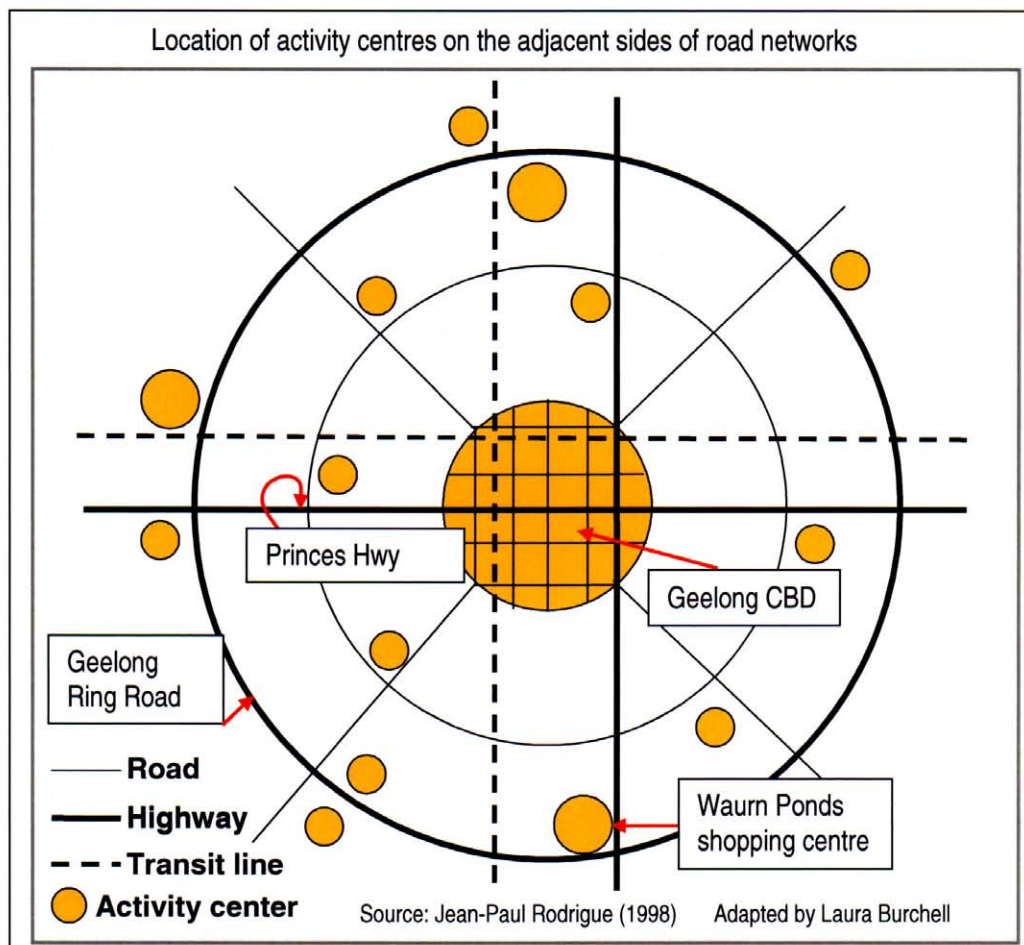


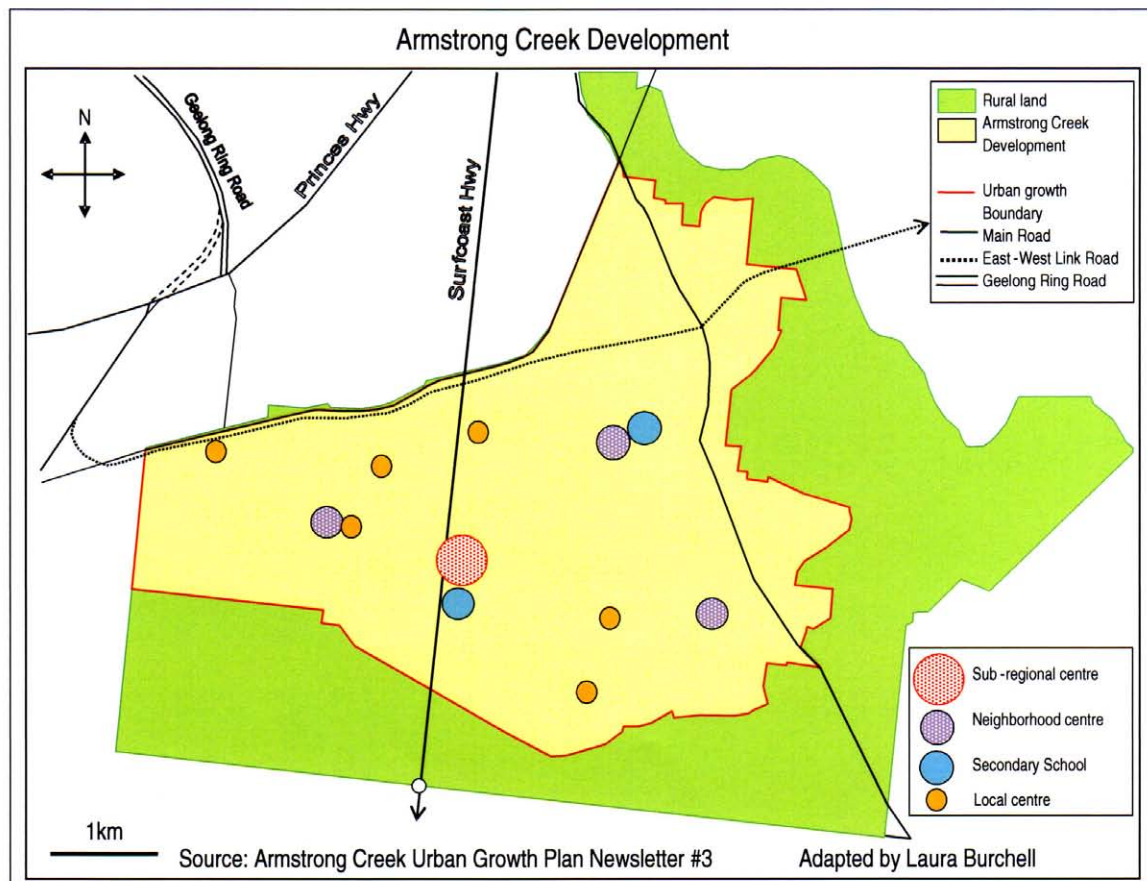
Figure 3: Location of activity centres adjacent to major transport routes in Geelong as an example of a weak centre.

3.4 New suburbs as the result of the expansion of transport networks

The proposed Armstrong Creek development represented in Map 11, located on the southern fringe of Geelong, was also another area considered for urban sprawl in the survey, validated by the statement, *'The Armstrong Creek/Mount Duneed primary growth corridor warrants special consideration as the focus of the region's future population growth.'* (City of Greater Geelong, Department of Infrastructure and VicRoads, 2003, p.34) Despite this, drawn from the results of the survey, Armstrong Creek is not the highest perceived area for possible urban sprawl. However, the City of Greater Geelong has identified it as the Geelong region's key

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area for urban growth. It states in the Geelong Advertiser, *'Armstrong Creek will be home to 40,000 people within 50 years as it rides the region's projected population boom and will provide a bonanza of 22,000 jobs in services and technology industries.'* and would also *'ease growth pressure on the Bellarine Peninsula and provide new opportunities for the Surf Coast'* (Lannen, 2006). Illustrated in Table 1, the development will have just under 22 000 dwellings, with the majority of housing comprising of *'conventional density housing lots averaging around 550m².'* (City of Greater Geelong, 2006)



Map 10: Proposed Armstrong Creek Development planning scheme

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

	Dwellings	Population
Conventional density housing	15,450	38,010
Medium density housing	4,060	9,990
Higher density housing	1,760	4,330
Shoptop apartments	660	1,620

Table 1: Planned Armstrong Creek housing dwellings and population for its future development, with the majority of the population in spacious conventional density housing.

There exists a strong correlation between the expansion of transport networks and urban growth, highlighted by the development of peripheral activities, suburban shopping precincts and the expansion of residential zones. Figure 4 shows the evolution of the spatial structure of a city using the model of Jean-Paul Rodrigue (1998). With the construction of a major transport axis, there is an expansion from A to B, of peripheral activities and a central area in which core and central activities occur. At present, without the Geelong Ring Road, Geelong is at B. With the support of this model, it can be predicted that with the Road, Geelong would move from B to C. This movement would encourage further expansion in peripheral activities and central areas to develop close to the major transport axis interchanges, as urban sprawl is expected to occur.

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

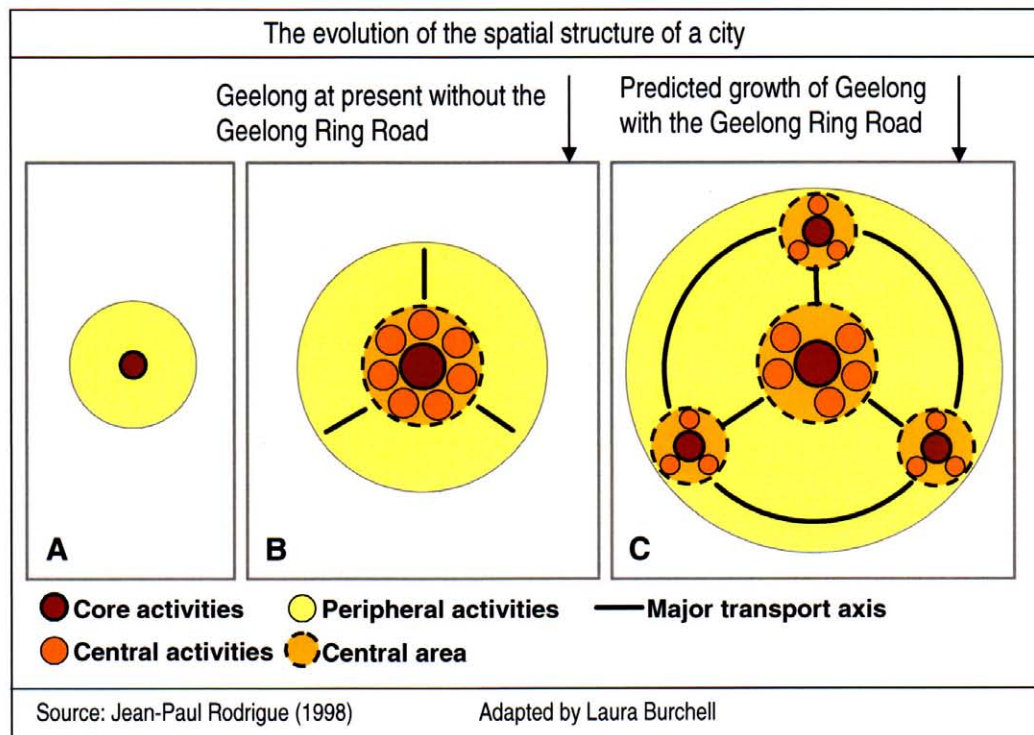


Figure 4: The evolution of the spatial structure of a city adapting the model of Jean-Paul Rodrigue (1998)

3.5 Correlation of the Geelong Ring Road with the Melbourne 2030 Strategic Plan

In Australia, urban growth usually takes place in the form of urban sprawl as there is an expansion of urban growth laterally. Urban growth is to a degree synonymous to urban sprawl, hence there is also a strong correlation between expanding transport networks and urban sprawl. Melbourne, Victoria's capital city, is a classic example of a city stricken by urban sprawl as the city continues to grow laterally, with its urban fringes constantly being rezoned. Figure 5 is a proposal of the strategic *Melbourne 2030* Strategic Plan and shows the current urban growth areas and predicted urban growth zones. Hence, where urban sprawl is and is most likely going to occur along major transport routes on Melbourne's urban fringe and its surrounding areas. Particularly evident is how the city has, and is going to continue to expand

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in the direction of the major transport routes. Examples of this in Figure 5 are shown at regions

A and B.

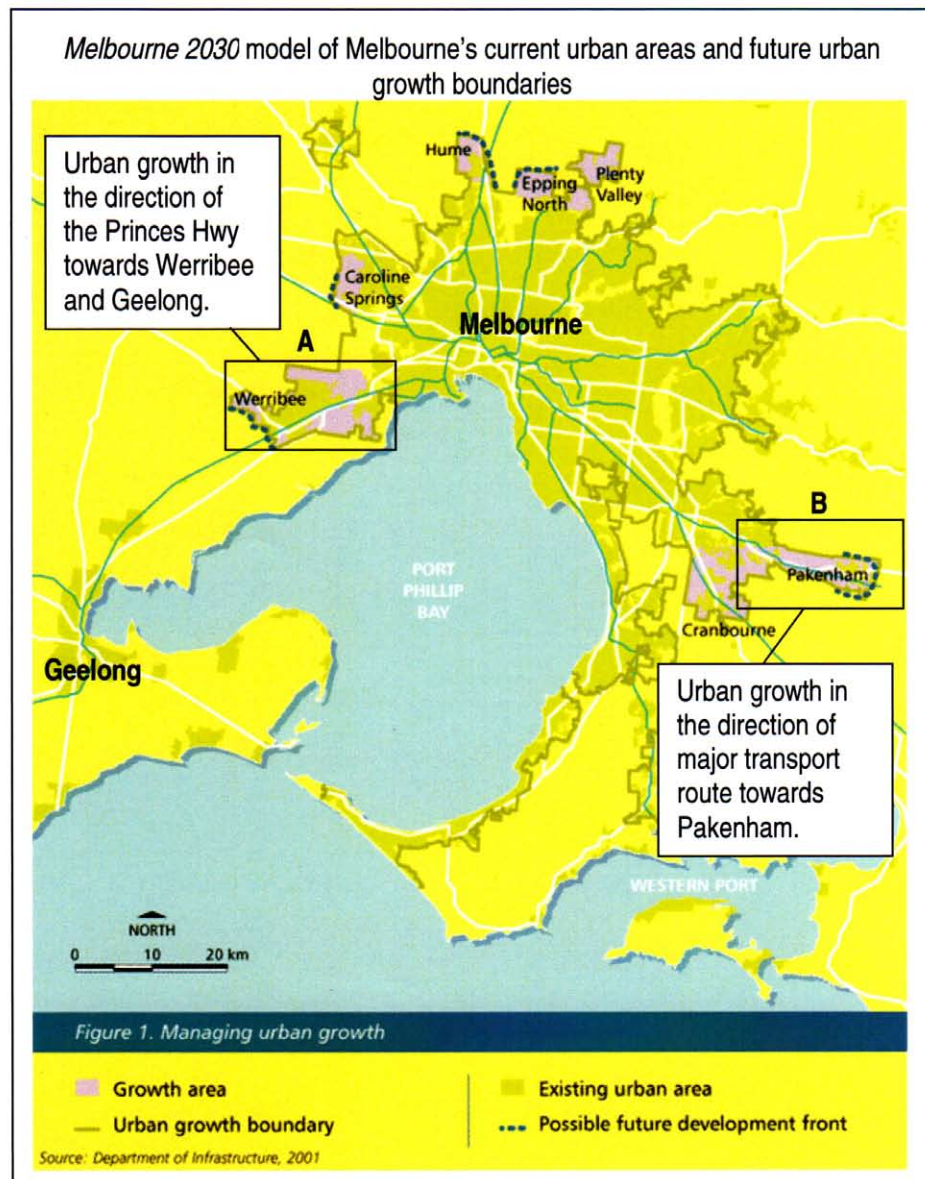


Figure 5: Current and predicted growth of Melbourne and surrounding areas as predicted by *Melbourne 2030* planning scheme.

3.6 Increased accessibility as a result of the Geelong Ring Road

Properly functioning and efficient transport networks is a key factor in identifying where growth areas will be, because *'When people look at housing, they don't just look at bricks and mortar;*

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

they look at schools and transport and that can have a significant and positive impact.' (Mitchell, 2006). It is widely perceived that the development of further transport networks boosts growth in areas that the road runs through, for it increases accessibility (Figure 6). It also often reduces travel time. This is shown in Figure 6, which is an adaptation of the work of Jean-Paul Rodrigue (1998), which depicts how the development of a ring road reduces the time required to travel through Geelong. Furthermore as a result, the 'ring roads impact on spatial structure by favoring a radial pattern (doughnut effect) and the development of commercial, residential and industrial activities nearby highway interchanges. The decreasing dynamism of central areas is often linked with the emergence of centres in the periphery.' (Rodrigue 1998). This is illustrated in Figure 6. By the development of secondary centres at the major highway interchanges this consequently structures suburban development to occur on the adjacent areas of the Ring Road that is represented by the shaded region surrounding the Ring Road.

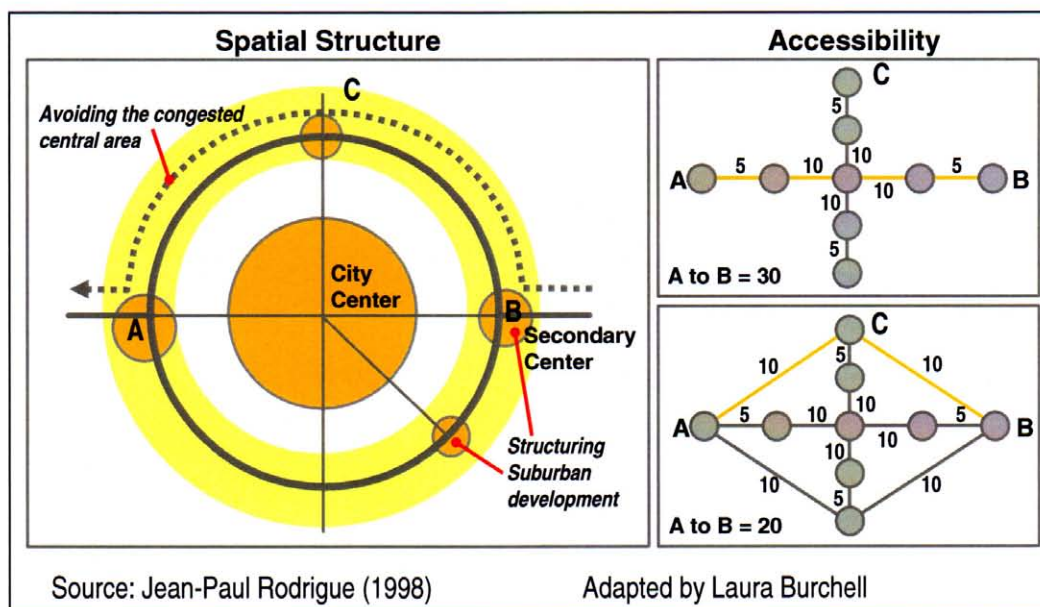


Figure 6: The model of the spatial structure of a city developed by Jean-Paul Rodrigue

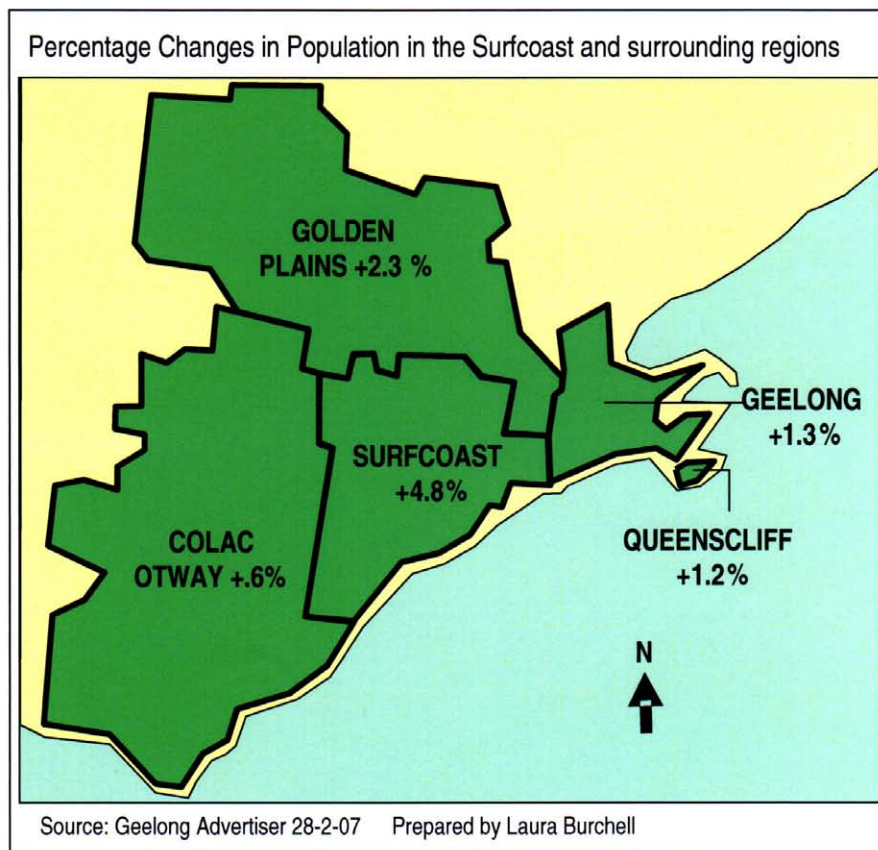
Also in the survey (Appendix A), there was the option of 'Other', in response to the question concerning in which areas they believed urban sprawl will occur. 53 people (9 percent) marked

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

'Other', but of them only 25 specified actually what 'Other' areas they believe urban sprawl would occur in. This may be due to a significant proportion of the respondents not being from Geelong and consequently may not know the area that well. Therefore, they may have been unsure on a response and consequently just ticked 'Other'. However, for the ones that specified possible areas for urban sprawl, the areas that were identified included, the Surfcoast, Torquay, Lara, Ceres, Grovedale, Bannockburn, Fyansford and Stonehaven (Appendix B). These link closely with other areas mentioned in the *Geelong Ring Road Strategic Study* that also highlighted Lara, Bannockburn and Grovedale as areas of '*existing and strategically identified growth areas in the Geelong Region*' (City of Greater Geelong Council, 2002, p.33).

Further to this, in the article '*Surf Coast's growth spurt*' (2007), there has been major growth along the Surf Coast. This predominately includes the coastal townships of Torquay, Barwon Heads, Ocean Grove and Anglesea. There has been a 4.8 percent increase in population from 2005 to 2006 in the Surf Coast (Map 9) as '*the seachange phenomenon is holding true with the Surf Coast Shire, the fourth fastest growing council in Victoria*'. (Pike, 2007) With an additional 1105 people coming to the Surf Coast between 2005 and 2006 '*the population boom puts pressure on the council to manage the growth*' (Pike, 2007). Consequently '*the council was looking to make more land available to cater for residential growth in the next ten to fifteen years.*' (Pike, 2007) This clearly indicates that urban sprawl is occurring and only going to occur further in the future along the Surf Coast, especially with the increased accessibility that the Ring Road will allow into this area. Also, declared in the *Greater Geelong Planning Scheme* is that '*Drysdale/Clifton Springs has also for many years been designated for coastal growth on the Bellarine Peninsula and Council continues to support this strategy.*' (City of Greater Geelong Council, 2006)

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?



Map 11: Percentage Increase in population 2005-2006

3.7 Phenomenon of suburbanisation

Urban sprawl influences suburbanisation, for put forward by Codrington (2005, p.547) *'the construction of expressways has accelerated the trend towards suburbanisation'* Suburbanisation is *'the overall movement and resettlement of people from inner city locations to vast new areas of housing further from the CBD'*. This can be seen in Figure 6 below developed by Jean-Paul Rodrigue (1998), which shows the effect of transportation on urban landscapes. At current Geelong is at Phase D, and with the Ring Road can be predicted to grow to Phase E. As a result of the development of the Ring Road there is predicted to be an increase in the suburbanisation of Geelong, indicated by the zone 'new suburbs'. In Figure 7, the phenomenon of suburbanisation prompts *'an increased separation of basic urban functions*

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(*residential, industrial and commercial*)' (Rodrigue, 1998). Consequently, many major shopping areas are located along major transport route intersections and approach roads, for example the Waurin Ponds shopping centre. With the population of the suburbs being provided for by the movement of functions to the suburban areas, this only increases the incentive for more people to move to such areas, and consequently urban sprawl to continue further still. Mentioned earlier, an example of a new suburb that is proposed to be developed is the new Armstrong Creek development. Comparing to Melbourne again, this can be supported by the declaration that 'about 40 percent of the 347 700 new houses in Melbourne will be built in growth areas of the suburban fringe.' (Gardiner, 2007)

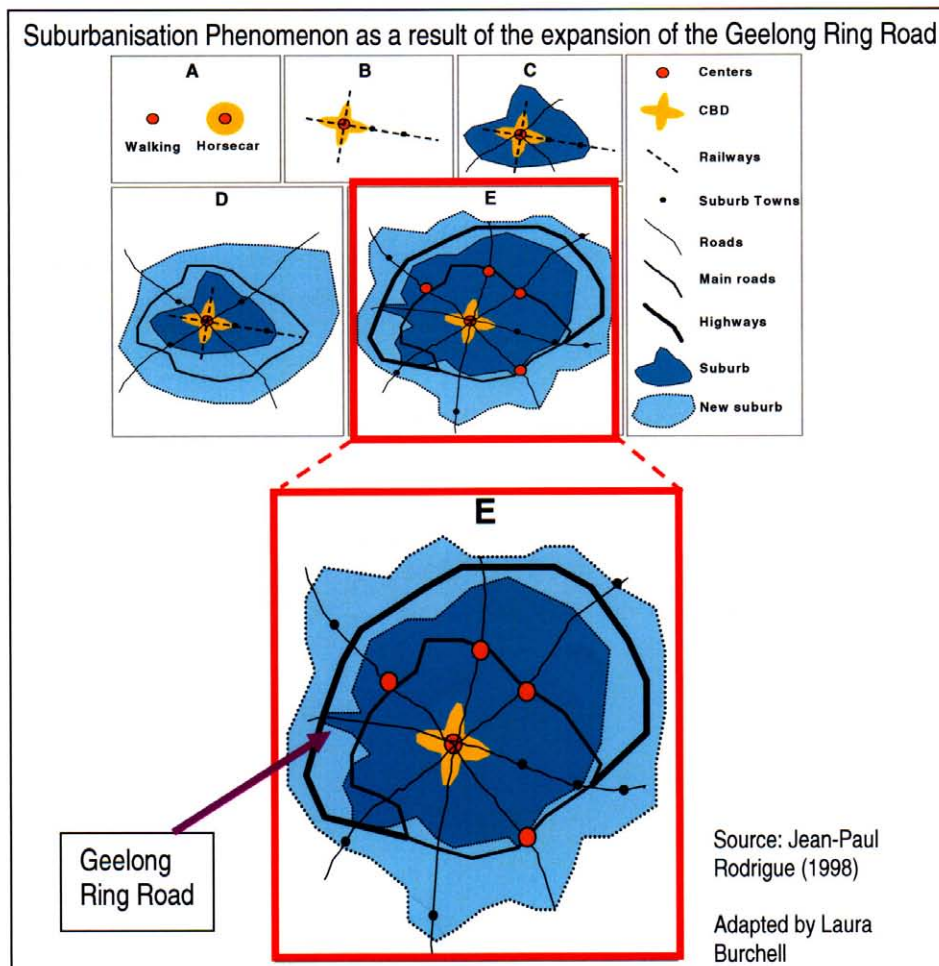
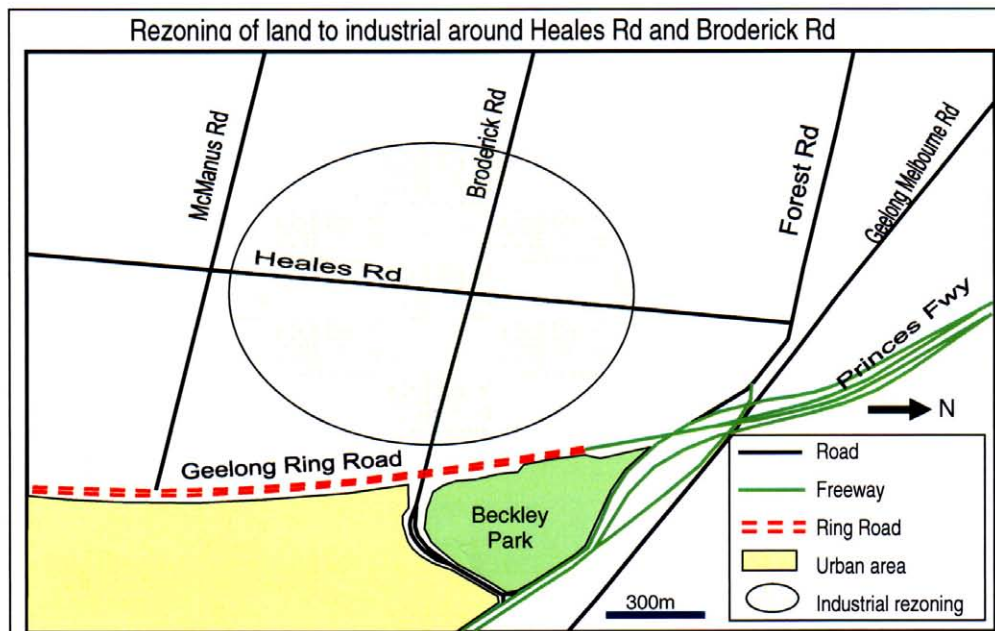


Figure 7: The phenomenon of suburbanisation as developed by Jean-Paul Rodrigue and adapted to fit the growth of Geelong.

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

3.8 Re-zoning and future long term growth beyond current planning schemes

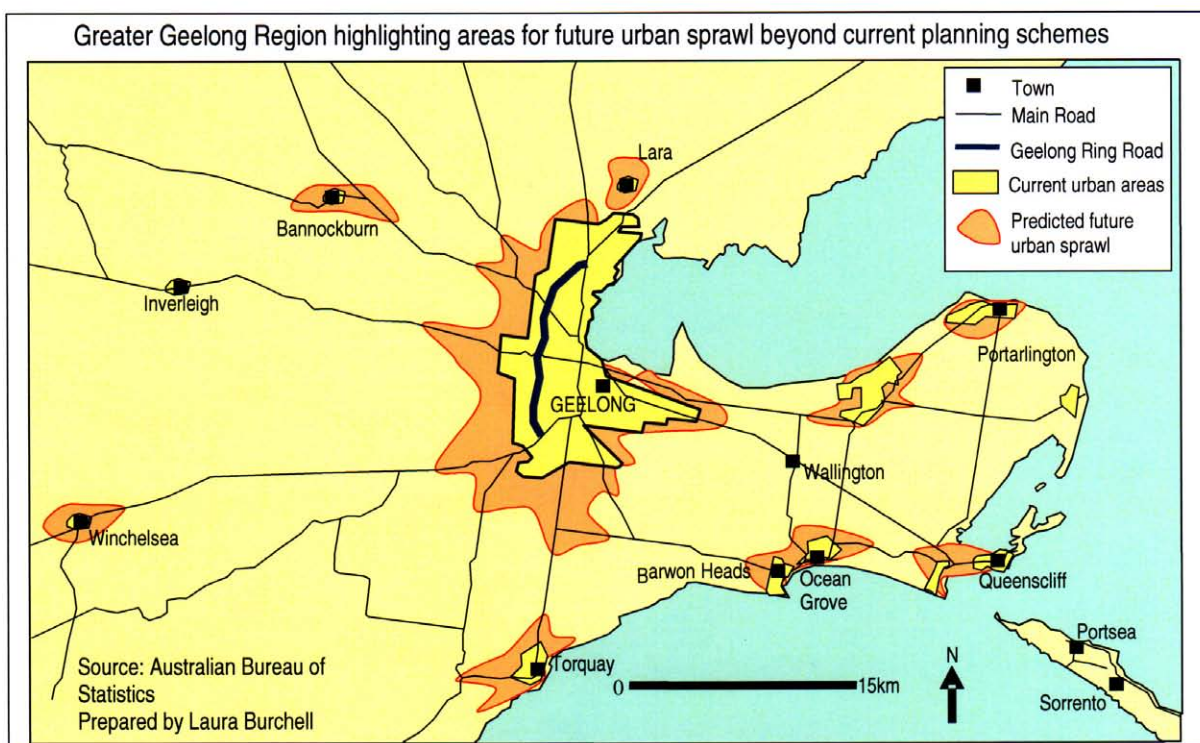
In stark contrast, there exists the argument that urban growth and subsequent urban sprawl is controlled and restricted by zoning plans established by the City of Greater Geelong. Whilst, this is true, these zoning laws only take into account controlling future growth in the short to medium term. Zoning over the years is constantly being re-evaluated, and consequently modified or changed due to increased demand being put on the land for various functions, whether residential, commercial or industrial. Evidence of this re-zoning that is already taking place in Geelong is clearly portrayed in the article *'Geelong industrial land boom'* (Tucker, 2007). The article informs that *'Geelong is set for an industrial development boom thanks to a plan to open land near the ring road'*. Depicted in Map 12, previously locked up land is being released and re-zoned in order for two large scale businesses that are looking to develop on Heales and Broderick Roads, Corio. This, not surprisingly is close to the Geelong Ring Road. Additionally, some policies are wrongly implemented as the Property Council warns that *'policies such as 2030 are failing because they underestimate the attachment to the quarter acre block'*. (Schneiders and Royce, 2007)



Map 13: Rezoning of land to industrial around Heales Rd and Broderick Rd, on the western side of the Geelong Ring Road

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

It has also been recognised in the Greater Geelong Planning Scheme in a statement about the growth of Ocean Grove, that *'further areas will be considered for rezoning as demand arises when existing lot supply decreases below 10 years supply.'* (Greater Geelong Planning Scheme 2006, p.3) Therefore, by looking forward to where the growth areas will be and consequently regions of potential urban sprawl, urban sprawl can be predicted to occur further beyond the current planning schemes in order to accommodate for Geelong's predicted future strong urban growth pattern. Drawn from transport and urban growth models illustrated in this report and the supporting evidence concluded from the primary and secondary evidence collected, Map 13 clearly illustrates, on a broad scope, the key zones of where future urban sprawl will most likely occur in the future.



Map 13: Future urban sprawl of Greater Geelong and surrounding regions beyond current planning schemes

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

4: Conclusion and further questions

It has been shown that there is a strong correlation between the development of a major transport network and urban sprawl. In particular, that urban sprawl will occur on the adjacent sides to the transport axis. Thus, in relation to the Geelong Ring Road, deduced by the primary data collected by surveying over four hundred people, considering planning schemes and strategic studies already undergone by the City of Greater Geelong, and further supported by the transport models of Jean-Paul Rodrigue, parallels drawn between the Eastlink Freeway and the *Melbourne 2030* model, urban sprawl is likely to occur predominately in the suburbs of Waurin Ponds, Lovely Banks, Wandana Heights and Armstrong Creek. Urban sprawl can also be predicted to occur further than the 'immediate region' suggested in the research question. This includes; in the satellite towns to Geelong including; Lara, Bannockburn and the coastal townships of the Surfcoast and Bellarine Peninsula.

A large proportion of this urban sprawl is, and will be continue to be, controlled by the City of Greater Geelong Council. However, in the long term, regions will have to be rezoned to accommodate for Greater Geelong, the Surfcoast and Bellarine Peninsula's growing populations. Consequently, urban sprawl will continue to occur further than what is highlighted in current planning schemes. Raising the question of: actually how far will the City of Greater Geelong expand to? If the Surf Coast and Bellarine Peninsula continue to grow at their current rates, how long will it take before the satellite towns of these regions adopt a 'ribbon like' effect with continuous urban areas that stretch from Lara in the north to Torquay in the south? These questions will be answered overtime as urban sprawl is stimulated by the influence of the Geelong Ring Road.

Word Count: 4000

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix A: Survey Front and Back

Note: At the time the survey was undertaken the Geelong Ring Road was called the 'Geelong Bypass' (as it is referred to in the survey), it was only in late February 2007 that the name of the road was officially changed to the Geelong Ring Road.

Survey: **The GEELONG BYPASS and URBAN SPRAWL**

I am undergoing a research project on how the Geelong Bypass will influence urban sprawl. Would you please be able to take a minute to fill out this short, anonymous questionnaire, to assist me in my research?

In which suburb and/or post code do you live? _____

Instructions: Please place a tick ☒ in the appropriate box.

In what age group are you in?

☐ 10 -17 ☐ 18-25 ☐ 26-40 ☐ 41-55 ☐ 56+

In what bracket is your annual income (\$)?

☐ 0-5,000 ☐ 5,001-20,000 ☐ 20,001-35,000 ☐ 35,001-50,000 ☐ 50,001+

What emotion best describes your feelings about the development of the Geelong Bypass?

☐ Positive ☐ Neutral ☐ Unhappy ☐ Apprehensive

What do you think is the main benefit of the Bypass?

☐ Reduced traffic congestion on Latrobe Terrace ☐ Easier accessibility to surf coast and south-western Victoria
☐ Reduced travelling times ☐ Improve road freight efficiency

What is your main concern about the Bypass?

☐ Air/Noise Pollution ☐ House Price Decay ☐ Urban Sprawl ☐ Environmental Degradation ☐ Take away business from Geelong

Urban sprawl is the lateral growth of urban areas, usually encroaching on agricultural land.

From your understanding of urban sprawl, do you believe that urban sprawl is a positive phenomenon?

☐ Yes ☐ No ☐ Not sure

Do you believe the Geelong Bypass will influence/increase urban sprawl?

☐ Yes ☐ No ☐ Not sure

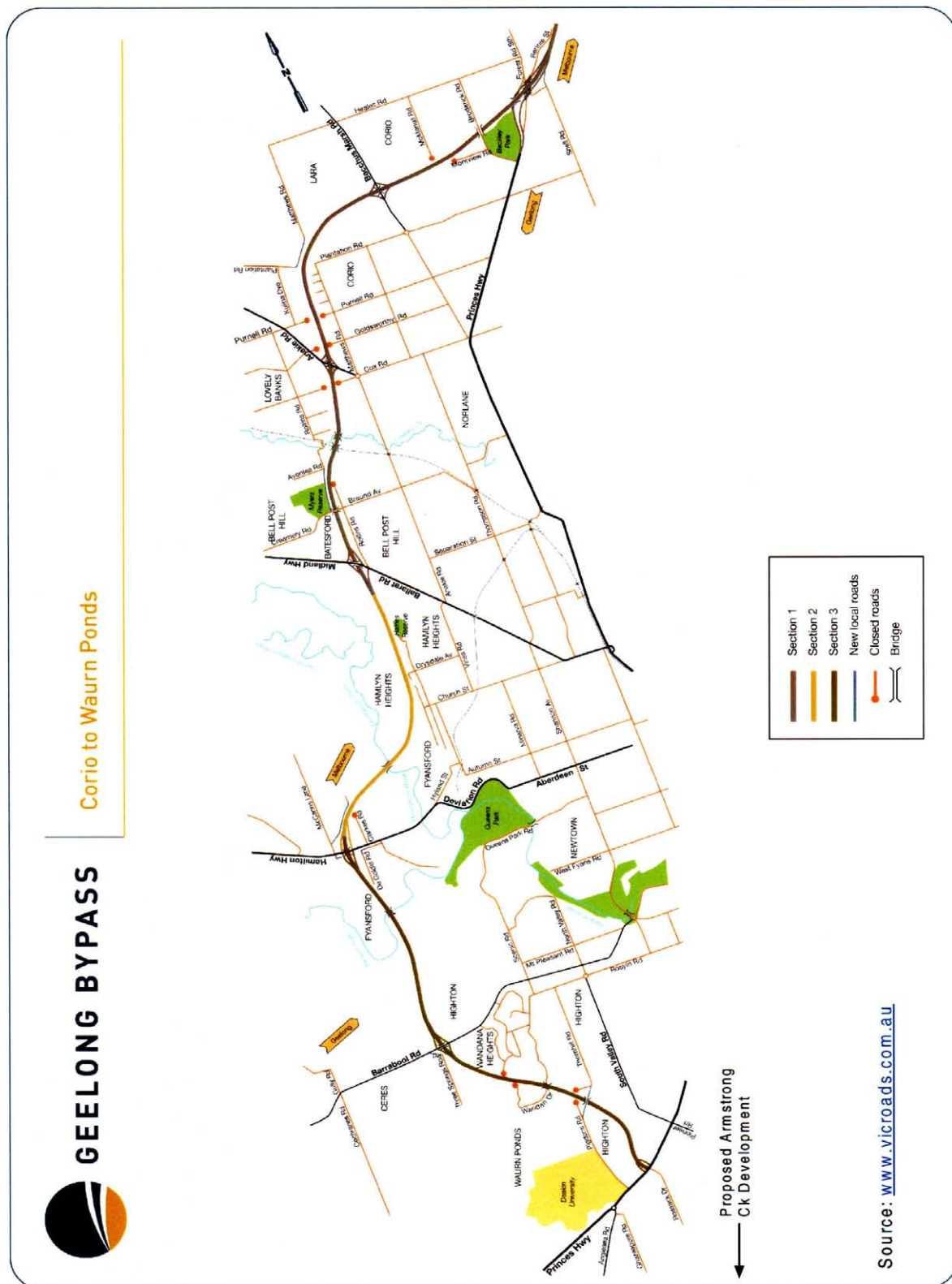
In what areas do you believe urban sprawl will occur? (Map on back for assistance)

☐ Highton ☐ Armstrong Ck ☐ Hamlyn Heights ☐ Lovely Banks ☐ Wandana Heights ☐ Other

Is there anything more you would like to add? _____

Thankyou very much for your assistance in my research, your time is much appreciated.

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?



It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix B: Table of Results from survey

Survey: 'In which suburb and/or postcode do you live?'			
Postcode	Number of respondents		
2533	1	3214	17
2711	1	3215	16
2905	2	3216	125
3000	3	3218	23
3006	1	3219	8
3013	1	3220	15
3021	1	3221	7
3023	1	3222	3
3030	1	3223	1
3032	1	3224	8
3033	2	3225	6
3036	1	3226	2
3037	3	3227	2
3040	1	3228	26
3041	1	3231	1
3047	1	3232	1
3054	1	3240	1
3057	1	3250	1
3064	3	3277	1
3072	2	3280	7
3076	1	3284	3
3082	2	3321	7
3084	1	3328	2
3101	3	3331	11
3104	1	3332	3
3121	1	3342	1
3124	1	3355	2
3125	1	3356	1
3132	1	3363	1
3133	2	3533	1
3142	1	3550	2
3145	3	3802	2
3175	2	3805	1
3192	1	3806	1
3194	1	3818	2
3195	1	3902	2
3199	1	3930	2
3204	3	4503	3
3206	1	4516	1
3212	10	5700	3
		6160	1
		7500	1

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Survey: 'In what age group are you in?'
Age Group (yrs)

10 to 17	23
18 to 25	49
26 to 40	88
41 to 55	135
56+	105

Survey: 'In what income bracket are you in?'
Income (\$)

0-5000	45
5001-20000	45
20001-35000	82
35001-50000	71
50001+	130

Survey: 'What emotion best describes your feelings about the development of the Geelong Bypass?'
Emotion

Positive	263
Neutral	87
Unhappy	15
Apprehensive	36

Survey: 'What do you think is the main benefit of the Bypass?'
Benefit

Reduced traffic congestion on Latrobe Tce	221
Easier Accessibility	161
Reduced travel times	157
Improve road freight efficiency	68

Survey: 'What is your main concern about the Bypass?'
Concern

Air/Noise Pollution	89
House Price	45
Urban Sprawl	66
Environmental Degradation	60
Take Away Business	106
No concern	70
No concern specified	23

Survey: 'Do you believe urban sprawl is a positive phenomenon?'
Urban sprawl: Positive phenomenon?

Yes	125
No	134
Not Sure	136

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Survey: 'Do you believe the Geelong Bypass will influence/increase urban sprawl?'
Influence/increase urban sprawl

Yes	225
No	51
Not Sure	133
Total	408

Survey: 'In what areas do you believe urban sprawl will occur?'
Areas

Highton	59
Armstrong Ck	68
Hamlyn Heights	57
Lovely Banks	94
Wandana Heights	66
Waurm Ponds	177
* Other	53

***Location of 'Other' areas (from previous question)**

not specified	28
all over (added)	9
none	1
Surfcoast	3
Torquay	3
Lara	2
Ceres	2
Grovedale	2
Bannockburn	1
Fyansford	1
Stonehaven	1

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix C: Article: 'Surf Coast's growth spurt'



It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix D: Article: 'Road to prosperity'

Eastlink still giving property a boost Road to prosperity

Peter Taylor

THE Eastlink effect will continue unabated this year with property pundits tipping strong price growth in suburbs along the tollway.

And some outer suburbs are poised for a modest return to favour buoyed by other infrastructure projects, experts say.

Gazing into the crystal ball, Victoria's peak residential real estate body has named four suburbs close to the \$2.5 billion tollway among its 10 "suburbs to watch" for the year to come.

Southern Eastlink gateway Seaford, among Melbourne's best-performing postcodes last year, makes the list compiled by the Real Estate Institute of Victoria.

Institute chief Enzo Raimondo said Seaford had already shared the Eastlink spoils with strong growth in recent years.

Over the past five years, only two suburbs had achieved higher capital growth, he said.

"It is still affordable and families are likely to remain attracted to the excellent access to the beach along with the retail and entertainment options in neighbouring Frankston," he said.

The institute believes Edithvale will also get a tollway boost.

At the north end of Eastlink, Mitcham and Glen Waverley are also dubbed suburbs to watch, with Glen Waverley growing as a shopping and transport hub.

Mont Albert North would benefit from growing competition as buyers were priced out of neighbouring Balwyn North, Mr Raimondo said, and Burwood East suited young, price-conscious families.

Altona, in the west, is the other bayside suburb to make the list.

It was one of few suburbs where you could still find affordable property close to the water, Mr Raimondo said.

Flying the flag for the outer suburbs, Roxburgh Park and Werribee should also perform well.

Hocking Stuart director Gree Hocking agreed suburbs along Eastlink would continue to achieve strong price growth.

Mr Hocking nominated Frankston as a key suburb to watch, saying it was "shaking off a bit of its (negative) image".

"There's a lot of government and infrastructure money being poured in there," he said.

"In the northern suburbs, Coburg is a bit of a sleeper. With the knock-on from Brunswick and Carlton, it's worth having a bit of a look at."

Buyer advocate David Morrell expected a similar pattern of price growth this year to last, with top-end suburbs making the strongest gains.

The bayside and inner suburbs would again prove most popular, Mr Morrell said.

NOT QUITE A HOME TRUTH

IT was a case of hit and miss for the Real Estate Institute of Victoria's list of suburbs to watch.

Just one of the 10 suburbs nominated this time last year, Glen Iris, finished in the top 10 for annual price growth in the year to September.

But five other suburbs on the institute list were a stone's throw from some of Melbourne's best performers.

The Glen Iris median house price was \$795,000, up 15.2 per cent from \$690,000.

Mitcham, dubbed a hot spot by the institute last January, did not make the top 10.

But neighbouring Ringwood North did, with the median climbing 20 per cent to almost \$445,000.

Likewise, REIV nominee Flemington did not make the cut, but Ascot Vale did with price growth of 17 per cent to more than \$500,000.

Other near misses were West Melbourne and Seddon, with nearby Footscray West ranking 17th, while Oakleigh also missed out but Mount Waverley was ranked 18th, with growth of more than 10 per cent to a \$400,000 median.

SUBURBS TO WATCH
Areas predicted to have strong price growth this year:

	Sept '06 median	June '06 median	Sept '05 median	Sept '04 median	Quarterly change	Annual change	2-year change
Bundoora	\$317,500	\$319,944	\$305,000	\$297,000	-0.8%	+4.1%	+6.9%
Edithvale*	\$390,000	\$365,000	\$386,500	\$315,000	+6.8%	+0.9%	+23.8%
Glen Waverley	\$448,100	\$460,500	\$456,000	\$420,000	-2.7%	-1.7%	+6.7%
Altona*	\$350,000	\$400,000	\$360,000	\$327,750	-12.5%	-2.8%	+6.8%
Mitcham	\$367,000	\$363,000	\$363,000	\$353,900	+1.1%	+1.1%	+3.7%
Mont Albert North*	\$561,500	\$547,500	\$492,500	\$508,500	+2.6%	+14.0%	+10.4%
Roxburgh Park*	\$260,000	\$275,000	\$262,000	\$260,000	-5.5%	-0.8%	+0.0%
Seaford	\$280,000	\$275,000	\$247,500	\$239,950	+1.8%	+13.1%	+16.7%
Burwood East*	\$395,500	\$367,500	\$380,000	\$365,875	+2.1%	+4.1%	+8.1%
Werribee	\$224,000	\$225,000	\$215,000	\$222,000	-0.4%	+4.2%	+0.9%

* indicates that less than 30 sales were recorded during the September quarter, 2006

LN Herald Sun 20-1-07

Source: REIV

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix E: Article: 'Freeway becomes road to prosperity'

Freeway becomes road to prosperity

Geraldine Mitchell
property reporter

CONSTRUCTION of the EastLink freeway has sparked a frenzy in the real estate market, with house prices soaring in adjacent suburbs.

The Real Estate Institute of Victoria said house prices have jumped in 14 of the 20 suburbs along the corridor since the toll road was announced two years ago.

Keysborough recorded the biggest rise, with its average house prices up a staggering 68 per cent to \$420,000 since the project was announced.

Ringwood North was next, with a \$78,000 (21.3 per cent) rise to a median price of \$443,750 for the past quarter.

It was followed by Scoresby, up 19 per cent, Heathmont (up 15 per cent) and Doncaster (up 14.3 per cent).

Frankston, Nunawading and Rowville prices all increased by more than 8 per cent.

The 40km EastLink project will link Frankston and Mitcham for an estimated \$2.5 billion.

REIV president Adrian Jones said accessibility was a key factor in determining property prices.

"When people look at housing, they don't just

look at bricks and mortar; they look at schools and transport and that can have a significant and positive impact," Mr Jones said.

"I think they (figures) do reflect that buyers value accessibility."

"Commercial, industrial and those distribution centres are also ex-

periencing the same appreciation.

"Accessibility is a big issue and obviously, when we're time poor, people value it."

Mr Jones described the rise in Keysborough housing values as staggering.

"Anything short of living on the fringe of Perth, nobody around here's ever experienced that sort of growth," he said.

Mr Jones said buyers still had time to invest, with the project not due for completion until 2008.

He discounted the suburbs with falls in property prices as statistical anomalies.

"If people were discounting them (suburbs) because they thought they were a long way away, they're now reviewing their assessment of properties, because it's very convenient," Mr Jones said.

"It's certainly brought them to the forefront of people's minds and history has proved that getting close to good transport lanes makes a big difference to prices."

ROAD TO RICHES

How house prices in areas surrounding EastLink have risen:

	Dec qtr '04 median	Sept qtr '06 median	% change
Dandenong	\$246,500	\$233,000	-5.5
Dandenong Nth	\$240,750	\$250,000	+3.8
Doncaster	\$454,813	\$520,000	+14.3
Donvale	\$535,000	\$485,000	-9.3
Frankston	\$227,500	\$246,500	+8.4
Heathmont	\$289,000	\$332,750	+15.1
Keysborough	\$250,000	\$420,000	+68
Metro Melb	\$370,000	\$377,000	+1.9
Mitcham	\$362,550	\$367,000	+1.2
Mulgrave	\$295,000	\$307,500	+4.2
Noble Park	\$242,500	\$241,500	-0.4
Nunawading	\$340,000	\$368,250	+8.3
Ringwood	\$320,000	\$320,725	+0.2
Ringwood Nth	\$365,750	\$443,750	+21.3
Rowville	\$327,875	\$355,000	+8.3
Scoresby	\$261,000	\$310,500	+19
Seaford	\$243,500	\$280,000	+15
Vermont	\$340,000	\$350,000	+2.9
Vermont Sth	\$426,125	\$442,125	+3.8
Wantirna	\$305,000	\$321,000	+5.2
Wantirna Sth	\$421,000	\$356,500	-15.3

IM - Herald Sun 18/11/06

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix F: Article: '\$35m makeover'

New shops and a new look for Waurm Ponds centre

\$35m makeover

RAINIE FRASER

THE Waurm Ponds Shopping Centre will receive a \$35 million makeover next year, including new shops, kiosks and improved walkways.

About 36 speciality shops will form an internal mall in front of Target, which will be pushed back into the building but will have increased floor space.

Mayor Peter McMullin said it was a "great" project that would cater for the region's growing population.

"It's a thriving centre and I wish it well," Cr McMullin said.

"Waurm Ponds is growing at such a rate the car park is one of the key issues that's been addressed.

"Overall I think it's a real positive for that area ... and it's going to be servicing a real increase in the population in that region.

Australian Unity Investment Retail Property Fund will also increase the entire centre's retail floor space by a third, bringing it to 21,000 square metres.

The redevelopment, which is expected to be finished by the end of next year, will include improved vehicle and pedestrian access and two major tenancies.

It received ministerial approval in 2003 and part of the work has already been completed, including a car park upgrade.

An impression of the new-look centre.



and the expansion of the Coles supermarket.

Geelong Chamber of Commerce executive director Lawrie Millar said the chamber would support the project as long as developers provided suitable off-street car parking.

"It just shows the area is growing more dramatically and obviously the shopping centre developers believe they need to cater for and we reinforce that need," Mr Millar said.

"That's the growth area."

AUI head of property

Martin Hession said the company's policy was to enhance its trusts' properties through re-development and expansion programs that add value to investors.

"Existing retail outlets in the centre have seen strong sales growth over the past seven years, and anticipated population growth in the area indicates that this will continue," Mr Hession said.

"Areas of rural and semi-rural land close to the centre have been identified for residential development ... driving demand for shopping outlets."

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix G: Article: 'Our Futurama'

New suburb to set national benchmark

Our futurama

DANNY LANNEN

RESIDENTS in Geelong's new southern suburb won't need to walk further than 400 metres to find a shop.

That's one of the promises being made by Geelong city councillors as they seek reaction to plans for Armstrong Creek, between Grovedale and Mount Duneed.

They believe the self-contained suburb will set new national standards in residential planning.

Each of the 22,000 houses at Armstrong Creek will have a third pipe, enabling use of recycled water. A rail line will eventually link the suburb

with Geelong and Torquay and children will attend one of six primary and two secondary schools.

Hubs with schools, shops and public amenities will be within easy reach of all residents.

Councillors tabled the plan last night and hope it will attract avid interest during a 10-week public comment period.

They believe the suburb will start to take shape on its 2350-hectare site from 2010.

"The stage is now set for us to take that giant step," city strategic development portfolio holder Cr Shane Dowling said.

"This will set a benchmark for planning in Australia. People are going to look at this and say 'wow', and that's how it should be."

Armstrong Creek will be home to 54,000 people within 50 years as it rides the region's projected population boom and will provide a bonanza of 22,000 jobs in service and technology industries.

It will unfurl with an elaborate public transport network, aiming to reduce car travel, and a new railway station at Rossack Drive, providing new travel options for Deakin University students.

A water use policy will make rainwater tanks and

low water use gardens compulsory.

Sport grounds will be built in stormwater basins and city planning portfolio holder Cr Rod Macdonald believes use of third pipes will set new standards.

"Sustainability is crucial and we've all heard about our limited water supply," Cr Macdonald said.

"We've taken steps to ensure we've got the most up-to-date creative thinking applied here."

Barwon Water has suggested we consider third pipes. We believe in perspective of the region Armstrong Creek will be the trigger for

people to say, let's put them in."

The suburb will have reserves for a rail line and for a road linking the Geelong ring road to the Surf Coast Highway and beyond.

Cr Dowling said the greenfield site would enable planners to set the transport grid right from the start.

"All great cities of the world have got great public transport," Cr Dowling said.

"That's a very positive aspect of it."

He promised the attraction of living at Armstrong Creek would ease growth pressure on the Bellarine Peninsula and provide new opportunities for the Surf Coast.

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Appendix H: Article: 'Super-size City'

■ 22,000 JOBS ■ 54,000 PEOPLE ■ 22,000 DWELLINGS ■ 2350 HECTARES

SUPER-SIZE CITY

... WOULD YOU LIKE A RAILWAY STATION WITH THAT TOO?

GEEELONG councillors yesterday tabled a plan for the new Armstrong Creek development which will up-size the city to a bustling metropolis.

"The stage is now set for us to take that giant step," city strategic development portfolio holder Cr Shane Dowling said.

"This will set a benchmark for planning in Australia. People are going to look at this and say 'wow', and that's how it should be."

Armstrong Creek will be home to 54,000 people as it rides the region's projected population boom and will provide a bonanza of 22,000 jobs in service and technology industries.

FULL REPORT: Page 4

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Appendix I: Article: 'Homing in on growth demands'

Homing in on growth demands

MELBOURNE will need another 350,000 houses over the next 15 years to cope with population growth.

Booming suburbs in the outer southeast and in Geelong are struggling to cope with demand.

But a state government report, released yesterday, says there will be enough land for 25 years of expansion.

Melbourne's population is expected to grow by one million over 30 years.

Despite the need for more, 2700 fewer houses were built in new developments in 2005-06 compared with the previous year.

About 40 per cent of the 347,700 new houses in Melbourne will be built in growth areas on the suburban fringe.

The biggest growth is expected to be in Casey, Melbourne, Cardinia, Mornington Peninsula and Port Phillip.

Planning Minister Justin Madden said there was not enough land available in the Casey and Cardinia council areas, which included Cranbourne, Narre Warren and Pakenham.

"The Casey-Cardinia corridor has undergone a fairly sustained boom over the past six or seven years," Mr Madden said.

"This has meant that the many large land parcels that were released in the 1990s are

Ashley Gardiner

now either fully developed or approaching full development."

Mr Madden said the Government would fast-track rezoning in the area to cope with demand, including a 3000-house development at Officer.

He said more available land would be needed around Geelong, where 33,400 new homes would be built by 2022.

Speaking at an Urban Development Institute of Australia lunch, Mr Madden acknowledged criticism of the Bracks Government's controversial Melbourne 2030 blueprint for the city's growth.

The policy, designed to slow the urban sprawl, has sparked fears Melbourne's inner suburbs will be over-developed.

"We need to move past debating the merits of Melbourne 2030 and move on to more effectively implementing it," Mr Madden said. "We have had the debate on this topic and the very clear message on this issue has been, stick with the plan but work harder to get the implementation right."

Master Builders Association chief executive Brian Welch said he was glad to see the Government was now more concerned with implementing Melbourne 2030 than defending it.

It appears that the construction of the Geelong Ring Road (Victoria, Australia) may have an impact upon urban sprawl in its immediate region. To what extent is this a valid observation after considering appropriate geographical primary and secondary data sources and models?

Appendix J: Article: 'Geelong Industrial land boom'

Geelong industrial land boom

REBECCA TUCKER

REAL estate agent Bob Gartland predicts Geelong is set for an industrial development boom thanks to a plan to open land near the ring road.

Mr Gartland said he was dealing with two national companies interested in developing the Heales and Broderick roads area amid a Geelong council plan to release previously locked land.

"That's an exciting liberation of the marketplace when for years the whole thing has been almost locked up yet that's where the market wants to buy," Mr Gartland said.

He said the major drawback for Geelong's commercial growth was

a lack of available property.

"There hasn't been enough industrial land to service the demand in recent years and with the development of the new Princes Highway and the ring road, the importance of the Heales Rd and Broderick Rd area has increased in the marketplace," he said.

"Ironically, a lot of the land there has been held by the council and was originally land banked for the development of major industry, now that goes back to the Geelong Regional Commission days.

"It now seems there is a willingness by the council, prompted by this new framework plan to divest themselves of some of the land which should provide another

spike to the development of industry and manufacturing in the Geelong region."

The Heales Rd Industrial Estate Framework Plan was released for public comment last month, with the Geelong council expected to endorse it in April.

It highlights specific areas for development and the size and nature of the development within the 500 hectare Heales Rd industrial estate bound by Bacchus Marsh Rd, the Geelong ring road, Forrest Rd and the railway line.

The framework, completed by consultants MacroPlan, suggested it was necessary to modify planning controls to accommodate the demand for industrial land.

Australian dream just a recession away

By BEN SCHNEIDERS and ROYCE MILLAR

A RECESSION, not more land, would be the quickest way to ease Australia's housing affordability crisis.

With apologies to former prime minister Paul Keating, it is a recession Australia's barriers may need if they are to get back in the race for the increasingly elusive Australian dream.

Economists from both the ANZ and Macquarie Bank this week rejected claims by Prime Minister John Howard and international researchers Domographic that state attempts to slow urban sprawl in capital cities were to blame for record low housing affordability.

They say a decade of low interest rates is the main reason affordability is as bad now in Melbourne as it was in the early 1990s when rates hit 17 per cent.

Other factors fuelling demand were cuts to capital gains tax in 1999 and strong levels of immigration over the past decade.

Research by Macquarie Bank interest rate strategist Rory Robertson, a former Reserve Bank staff member, has found that poor housing affordability was largely the result of heightened demand, not a lack of land.

"If you didn't own a house when interest rates halved, you missed the boat," he said.

He looked at a recent study by US consultants Demographia, which blamed poor affordability internationally on restrictive planning regimes that limited land release. That study found Australia now had the least affordable housing in six developed countries surveyed.

But Mr Robertson said that unlike the popular Australian capitals that hug the coast and

are few in number, the more affordable cities — in the US in particular — were often "rust-belt," unpopular places, inland, where population was falling.

"That so many of Demographia's affordable markers clearly are low-demand locations makes a mockery of the supposedly supply-side story promoted by Demographia and the IPA (Institute of Public Affairs)," he said.

His findings contradict the repeated claim of Prime Minister John Howard and Treasurer Peter Costello that price inflation was fuelled by slow land release policies of state governments.

"It is about time that the inner-urban elites that dominate the... policies of state Labor governments were put aside in the interests of young home buyers who want to have a home of their own on the outer periphery of our great cities," Mr Howard said last year.

Most states now have planning strategies emphasising urban consolidation and slowing urban sprawl, the local version being Melbourne 2030.

The property industry and right-wing think tanks such as the IPA have also blamed the states, with the Property Council this month warning that policies such as 2030 are failing because they underestimate the attachment to the quarter-acre block.

Yet in Victoria, the State Government has guaranteed developing a 25-year land supply for housing.

Research by University of Sydney academic Nicole Curran has also raised doubts about Mr Howard's view. She found that new housing on greenfield sites was a small proportion of the market and the bigger influence was the high prices being paid in established suburbs.

She said even if governments released great swathes of land, developers would hold it until they got the price they wanted.

Surprisingly, even some developers seem to agree that supply is not a major issue.

David Devine, of Queensland-based Devine Limited, told *The Age* that Melbourne had a good supply of land. "We are bullish about Melbourne," he said. "They have a very good planning process."

Dennis Hickey, the head of the

Northern exposure: a housing project in Epping North. John Howard argues a greater release of such greenfield sites would ease housing affordability. PICTURE: CRAIG ARBMAN

gearing more attractive, as the key price drivers in housing.

He said that, "perversely," a sharp rise in interest rates or unemployment would improve affordability. But lowering the heat on the economy to anything like recession levels is unlikely in an election year.

The overall majority of Australians like the things that have made housing less affordable, the low interest rates," he said in 16 years the size of average new mortgages has more than

The association and the Commonwealth Bank estimated last month that, for the first time in 25 years, the average household could not afford to buy the average home.

tripled to \$225,000 in Victoria, according to the Bureau of Statistics. Median prices recently hit a record of just under \$400,000. The Housing Industry Association has warned that Australia faces an affordability crisis that is "undermining society's foundations".

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development division at Stockland, said planning issues were a concern in Victoria but were a far bigger problem in places such as Sydney. "It is an issue in Victoria, although Victoria has quite a good balance between available, developable land and demand."

But there is no quick fix for the affordability dilemma.

ANZ chief economist Saul Eslake sees low interest rates and the Federal Government's decision to cut capital gains tax in 1999, which made negative

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